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ABSTRACT

Individualized instructional programs arise from varied values, concepts and competencies and hence differ in terminology, goals, strategies and results, making an intelligible view of the field difficult. This manual provides educators with a tool which makes it possible for them to compare different individualized instructional programs by proposing a terminology applicable to all such efforts and by offering a means of identifying, quantifying and describing the significant dimensions of a program's individualization. Ten components of individualized instructional programs are included within the scope of analysis: program context, objectives, learner assessment, sequence, rate, media, grouping, program pattern, record of information, and use of information. The first section of the manual, format, describes the content of each component, including a graphic representation of the component, slides depicting examples of the component, and a general statement about the component's intent. The second section, Illustrative Questions, includes sample queries addressed by each component and slides illustrating answers to these questions. The final section, Definitions, gives a more detailed explication of the terminology used and a more extensive verbal definition of the slides used. (Author/LB)

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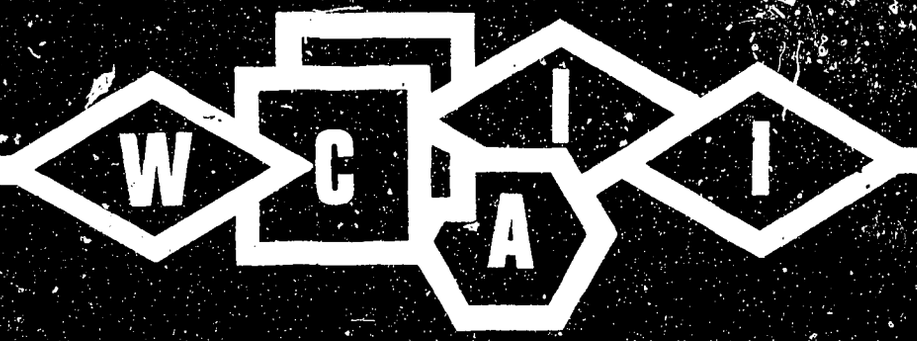

WISCONSIN CENTER FOR THE ANALYSIS
OF INDIVIDUALIZED INSTRUCTION

School of Education
University of Wisconsin–Madison

EM 011 684

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User's Manual

Descriptor for Individualized Instruction

M. Vere DeVault
Mary A. Golladay
G. Thomas Fox, Jr.
Karen Skuldt

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September, 1973

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Just as important was the continued expression of enthusiastic support by those with whom the researchers worked throughout the project. The nature of this support has convinced the researchers that now is the time to take more seriously the diversity of efforts underway to individualize instruction and to create procedures and techniques useful in communicating, analyzing and implementing programs designed to respond to individual needs of learners in our schools.

We want to make a special note of our appreciation to Donna Schleicher, our secretary, and to Kathryn Jenkins, our artist, for the invaluable assistance they have offered to this project.

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I.

Introduction

Strategies currently in use to individualize instruction have resulted from varied sets of values, concepts, commitments and competencies. Communication among educators about these strategies lacks substance frequently because terminology differs, goals and objectives (purposes) for which programs are designed differ, implementation strategies differ, hopes and aspirations differ and consequently results differ.

This variety has motivated the development of a Descriptor which provides a common basis for the description of instructional programs which offer individualization. The Descriptor for Individualized Instruction, in addition to proposing a terminology which is applicable to individualized programs, is specifically formulated to identify, quantify and describe significant dimensions of a program's individualization. The comprehensive description is summarized by a graphic presentation abstracted from the detail of comprehensive data collection and reporting.

purposes

USES OF DESCRIPTOR

There are three major uses for which the Descriptor was designed. These three basic uses include Description, Comparison, and Development.

Description. Description is the communication of specific programmatic features of instruction designed to individualize the instruction.

Comparison. Comparison is the communication of specific differences between two programs. A comparison can be made between different functioning programs or between a functioning program and the ideal program that is envisioned. The ideal program may be a long-range goal of a faculty or the written intent of the developer of a packaged program.

Development. Development is the process used in implementing an individualized instructional program. The use of the Descriptor makes the faculty aware of specific instructional features which must be addressed within an instructional program as well as communicating the specific goals and practices of the faculty.

DESCRIPTOR COMPONENTS

The focus of the Descriptor is upon three major areas in which an individualized program may be organized: the aims, instructional features and management of the program. Each of these areas is further divided into components.

Aims. The aims of an instructional program are the goals towards which the program is directed. The Descriptor includes two components under the Aims of the program: Objectives and Learner Assessment Procedures. Objectives show the directions towards which a program is designed. Learner Assessment Procedures show the methods used within the instructional program to determine to what extent the learners are progressing in the desired direction.

Instruction. Instruction is defined here as the specific features of a program that identify the possible range of classroom activities. The five components that are included within the area of Instruction are: Sequence, Rate, Media, Grouping and Program Pattern.

Sequence shows the possible order(s) of instructional units. Rate shows the variability of the number of units completed by learners. Media shows the kinds of materials used for instruction. Grouping shows the number of learners working together during instructional situations. Program Pattern shows the sequence of assessment and instructional activities that is repeated within each instructional unit.

Management. The management of an instructional program is the manner in which the learning resources are allocated. Two components under the Management area are Record of Information and Use of Information. Record of Information shows what specific classifications of information are kept. Use of Information shows who is using this recorded information. The extent to which planning sessions are used to allocate resources is shown for most components.

EDUCATIONAL IMPORTANCE OF THE DESCRIPTOR

The Descriptor for Individualized Instruction should serve several purposes. It can be used to suggest the many dimensions of individualization as well as the complexity of managing the various aspects of an individualized instructional program. The graphical representation of components demonstrates the interaction of various components of individualization and underscores their complexity. When used as a tool for examining individualization, the Descriptor lends itself to several uses. It can be used in describing functioning or ideal programs, comparing different programs (either functioning or ideal) and aiding in the process of developing new individualized instructional programs.

The Descriptor has proven to be useful as an aid to communicating specific instructional features associated with some of the wide range of goals and strategies being used under the general slogan of "individualized instruction."

cautions

Certain cautions must be undertaken by the users of the Descriptor for Individualized Instruction. It is very important that the user of this manual realize that the Descriptor is not designed to describe the entire range of possible instructional programs. Following are three cautions which have been impressed upon the WCAII staff in their experiences in using the Descriptor in over thirty different situations throughout the United States.

Caution 1. USE THE DESCRIPTOR TO REPRESENT ONLY THOSE KINDS OF PROGRAMS FOR WHICH IT WAS DESIGNED.

The Descriptor is designed to describe specific features of programs that are individualizing the instruction in order to increase the possibility that every student will be able to learn certain identified skills. The programmatic features that are described include the variety of materials used for instruction, the groupings used, the variability in the sequencing of units, the variation of rate of progress, the range of program objectives, evaluation techniques and system(s) for recording and using recorded information for program decisions. This perspective represented by the Descriptor has been found to be valuable in describing many current and ideal programs for individualized instruction.

There are some programs, however, for which the Descriptor is not designed and for which the perspective may be inappropriate. First, it is designed only for individualized instructional programs. It is not to be used for other kinds of interesting, traditional or innovative instructional programs. For example, the Descriptor does not pick up the more salient aspects of an activity-based instructional program or a program operated on the concept as described in A. S. Neill's Summerhill.

Caution 2. USE THE DESCRIPTOR TO DESCRIBE ONLY A SPECIFIC INSTRUCTIONAL PROGRAM.

The Descriptor is designed to describe one specific individualized instructional program at a time. It is not an instrument for describing many programs in one representation. For example, the Descriptor should not be used to describe the entire instructional program of a school system, a school, a team or even of a single classroom. The Descriptor does not average well across different programs. The specificity of the

component terminology (e.g., "percent of instructional time") would be used erroneously and, possibly, dishonestly if the Descriptor were used to describe many different programs at once. If one wanted to show a view of an overall instructional program for a school or school system, a composite picture shown on the Descriptor would be at least misleading and probably without meaning. The suggestion here is that if a view of a general instructional program is desired, and if the Descriptor were to be used, that a number of Descriptors be used to show a number of sample instructional programs.

Caution 3. DO NOT USE THE DESCRIPTOR AS AN EVALUATION INSTRUMENT UNLESS THE STANDARD THAT IS BEING APPLIED IS THE STAFF'S OWN IDEAL PROGRAM.

An evaluation instrument needs standards and there are no such standards included within this Descriptor. As has been stated, the Descriptor is designed to describe certain features of instructional programs: either a functioning program or a staff's ideal version of a program. The Descriptor is an evaluative instrument only to the extent that a staff wishes to analyze its own program with its own ideal for a program. Certainly, the Descriptor does represent some perceptions of features that different individualized instructional programs might contain. It is the opinion here, however, that there will never be one single "individualized" instructional program that will satisfy the ideals of all educators. One purpose of this Descriptor is for a staff to be able to say this is what we have now, but is this what we want to have in the future?

II.

Guide to Components

This guide introduces each of the ten Descriptor components in three ways. The first section, Format, describes the content of each component. This includes a graphic representation of the component from the Descriptor, the numbers of the slides which portray different examples of the completed component, a general statement about the intent of the component and directions for graphically coding the component. The second section, Illustrative Questions, includes sample questions addressed by each component and a short description of the slides that illustrate the range of answers to these questions. The third section, Definitions, is a more detailed reference to the terminology used within each component of the Descriptor. This more detailed reference includes definitions of all the terms of each component and a more extensive verbal description of the representative slides.

Each of these three sections addresses the components in the same order: Program Context, Objectives, Learner Assessment, Sequence, Rate, Media, Grouping, Program Pattern, Record of Information, and Use of Information.

It is suggested that the manual be used section by section until the user of the manual feels comfortable for his purposes with the intent, graphics and terminology of each component. For some users (or for some components) the first section, Format, might be sufficient. For other users (or for other components) the second section, Illustrative Questions may be needed in addition to the Format. For other users (or for other components), the third section, Definitions, may be necessary before the user feels comfortable with the component. This guide is designed so the user can stop at the appropriate section for one component and be able to refer to other sections for another component. It is important to realize that the slides accompanying this guide are to be used with each component and are referred to specifically in the second and third sections, Illustrative Questions and Definitions.

format

The following pages introduce the format of each component. For each component this introduction includes the graphic representation from the Descriptor, the slide numbers that portray examples of the component completed for different programs, a statement about the intent of the component and directions for coloring the component. This format for each component is presented in two pages.

If after looking at these two pages and referring to the representative slides, there is still some doubt about the intent or the graphic representation of the component, it is suggested that the user of this guide go to the second section which further explains the intent of each component by examining illustrative questions and sample responses to the questions shown by the numbered slides.

PROGRAM CONTEXT

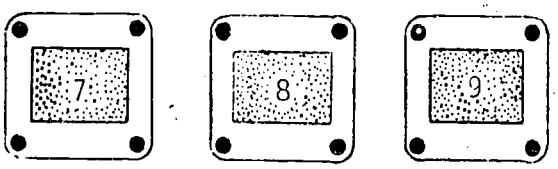
Functioning Program | Ideal Program

PROGRAM CHARACTERISTICS

Subject Matter	mathematics			reading			teacher education											
Grade Equivalents	P	K	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Production Agency	local schools			educational agency						commercial agency								
Packaging	modules			text			multi–texts			tests								
Learner Arrangement	alone			fixed groups			changing groups											
Learner Time	unscheduled			scheduled/fixed			scheduled/flexible											
Space Arrangement	open			multiple rooms			single room											
Staff Arrangement	teacher			teacher group			specialist(s)			aide(s)								

SOURCE OF DATA

- Instructor
- Learners
- Administrators/ Supervisors
- Developers
- Materials
- Other

Slides: 

PROGRAM CONTEXT

The Program Context component (slides 7 to 9) identifies the institutional setting of an instructional program. This component provides information about the general characteristics of the program which is being described. (See slide 7) Included in addition to the context of the program is the designation of the source of data used to describe the program. The component has three sections. The first identifies whether the program being described is a functioning program or whether it is an image of an ideal program. The second examines the institutional characteristics of the program. The third identifies the sources through which the data was gathered. A brief description of the three sections suggests the scope of information presented by this component.

DESCRIPTOR FOCUS

The first section of the component designates whether the program being described is either an on-going practicing program or a program that is intended or hoped to be operating in the future. If the program is operational or functioning, the appropriate box is filled in. If the program is someone's image of an ideal program, then that appropriate box is filled in.

DESIGN CHARACTERISTICS

The second section (Design Characteristics) describes the conditions under which the program is designed to operate. Subject matter, grade equivalents of the materials, physical characteristics of the instructional materials, the intended groupings of learners, and the space and staff arrangements are included.

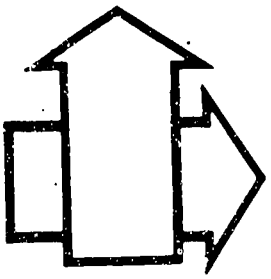
SOURCE OF DATA

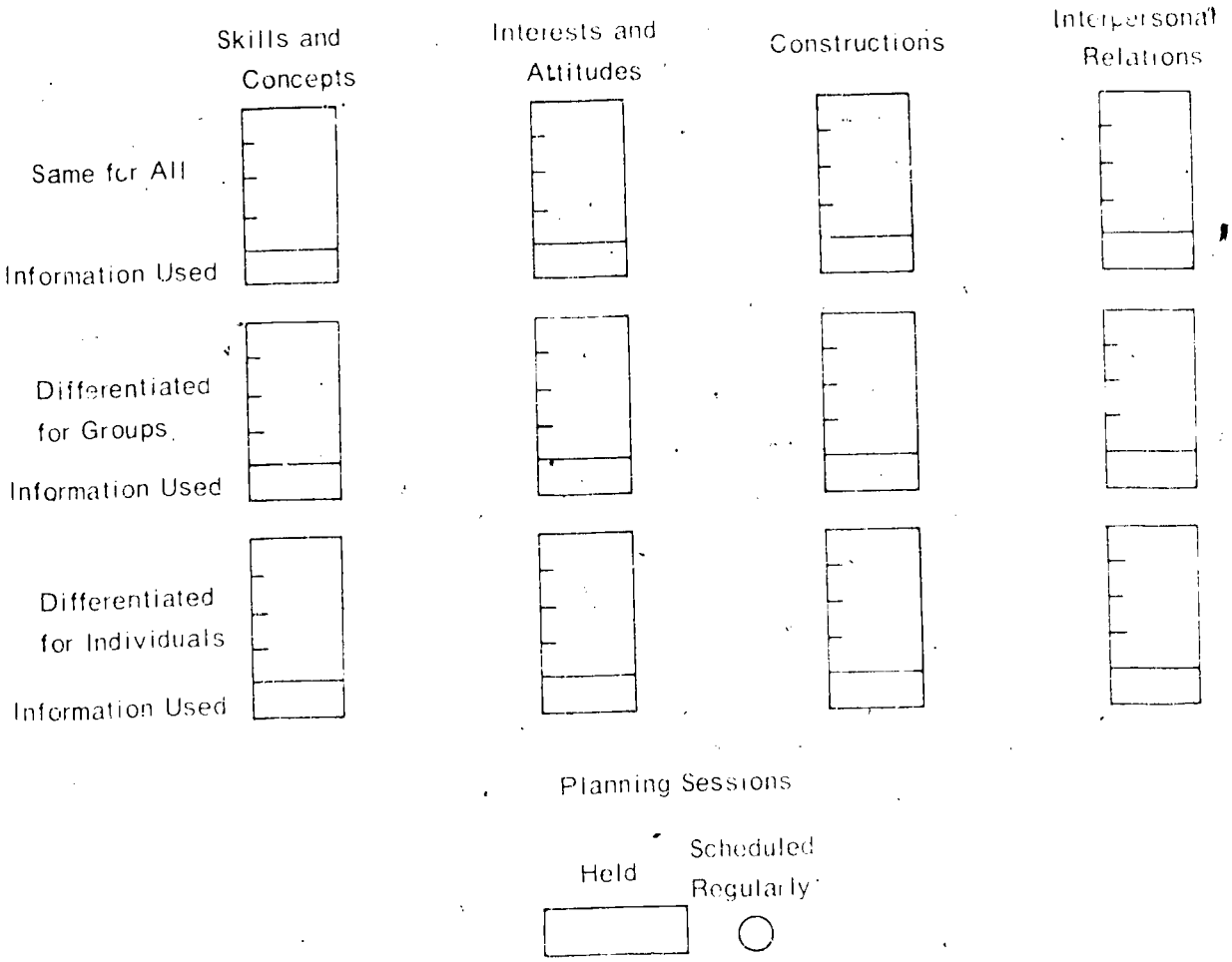
The third section (Source of Data) identifies the individuals or the materials from which the data about the program is being collected. These sources may include interviews with instructors, learners or administrators or they may include the materials, teacher guides or a combination of these sources.

Color Coding

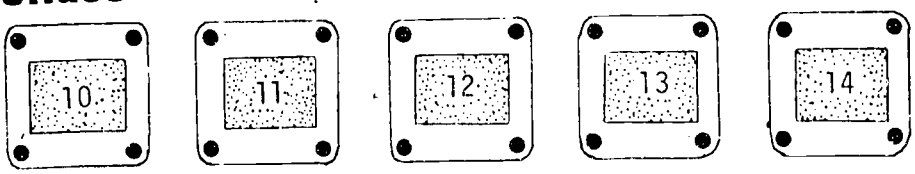
Green is used around the borders of the appropriate rectangles.

OBJECTIVES

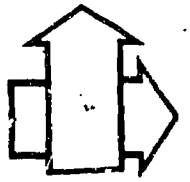




Slides:



OBJECTIVES

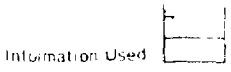


The Objectives component (slides 10 to 14) refers to the stated purposes of the instructional program. The description of instructional objectives in the present system is done in two dimensions. (See slide 10) One dimension is the type of objective, the other dimension is the way the objectives are identified with the learners. The use of information in prescribing objectives is also documented. The Descriptor considers four categories of objectives: skills and concepts, interests and attitudes, constructions and interpersonal relations.

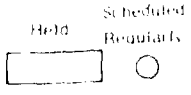
The major consideration given to these objectives is the extent to which they are identified with individual learners. There are three ways in which the objectives can be identified with the learner. One, the objectives can be identified as being the same for all learners. Two, the objectives can be identified as being differentiated for certain groups of learners. Three, the objectives can be identified individually, that is, learner-by-learner.

Color Coding

The larger rectangles used as indicators in this component of the categories of objectives and of the ways of identifying objectives with learners are color coded to learner (red), instructor (blue), or program (yellow) on the basis of who determines that the particular objectives are to be identified with particular learners. In the case where the decision is a joint one, multiple coloring is used. This multiple coloring should show appropriate proportional share of the decisions.

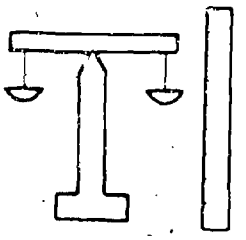


The smaller rectangles titled "Information Used" are colored green to indicate when there is recorded information used to identify an objective (or set of objectives) with a learner (or group of learners). This coloring is done in coordination with the coloring of the larger rectangles to indicate which of the decision makers (learners, instructors, program) use recorded information when identifying learners with program objectives.



The rectangle for Planning Sessions Held is color coded to who participates in these planning sessions: learner (red), instructor (blue), or program (yellow). If these sessions are joint meetings, this is reflected by the appropriate coloring. If the planning sessions are regularly scheduled, the circle is colored green.

LEARNER ASSESSMENT PROCEDURES

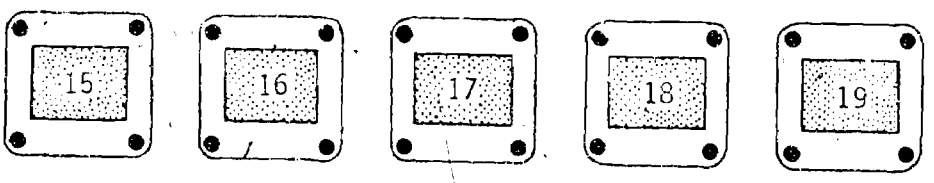


Testing	Skills and Concepts	Interests and Attitudes	Constructions	Interpersonal Relations
pre	☐ ○	☐ ○	☐ ○	☐ ○
mid	☐ ○	☐ ○	☐ ○	☐ ○
post	☐ ○	☐ ○	☐ ○	☐ ○
Conferences	☐ ○	☐ ○	☐ ○	☐ ○
Products	☐ ○	☐ ○	☐ ○	☐ ○
Other Observations	☐ ○	☐ ○	☐ ○	☐ ○

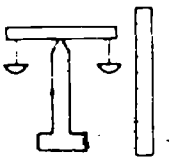
Planning Sessions

Held	Scheduled Regularly
☐	○

Slides:



LEARNER ASSESSMENT PROCEDURES

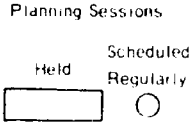


The Learner Assessment Procedures component (slides 15 to 19) relates how the learners are assessed. This is done by showing the kinds of learner attributes that are assessed as well as the procedures that are used for assessment. The recording of information from these procedures is also documented. The kinds of learner attributes that are assessed are in the same four categories as the objectives: skills and concepts, interests and attitudes, construction making, and interpersonal relations. The procedures for obtaining information about the learners include testing (pre-unit, mid-unit, and post-unit tests), conferences, products or other observations.

Color Coding

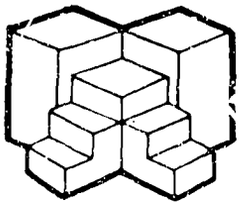
All rectangles used as indicators in this component are color coded to learner (red), instructor (blue), or program (yellow) on the basis of who determines when or that a particular type of information shall be obtained. In the case where the decision is a joint one, multiple coloring is used.

Circles represent the recording of information. If information is recorded, they are always colored green. If information from a particular type of procedure is only sometimes recorded, the circle may be shown as partially colored.



The rectangle for Planning Sessions Held is color coded to who participates in these planning sessions: learner (red), instructor (blue), or program (yellow). If these sessions are joint meetings, this is reflected by the appropriate coloring. If the planning sessions are regularly scheduled, the circle is colored green.

SEQUENCE



Linear Branched Network Nonspecified

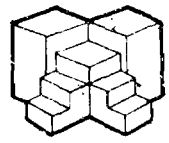
Planning Sessions

Held Scheduled Regularly

slides:

20 21 22 23 24 25 26

SEQUENCE

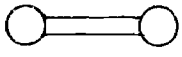


The Sequence component (Slides 20 to 26) refers to the order in which units of instructional material are studied by learners. In most individualized programs, materials are organized into chapters, units, or modules or other packages. This component examines the options for studying those units which are available to learners in the program.

Though units are made up of instructional content, this component does not examine the organization of content either within or across units, but only the alternative sequential order of units.

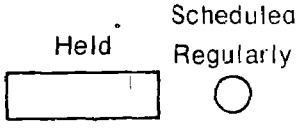
Color Coding

The participants who determine the sequence of units are identified through color coding the circles: learner (red), instructor (blue), or program (yellow). If the decisions are shared, this is reflected by the coloring.



Lines are used to show linear, branched or network sequence, these lines are colored according to the color (or colors) of the circle to which the line leads.

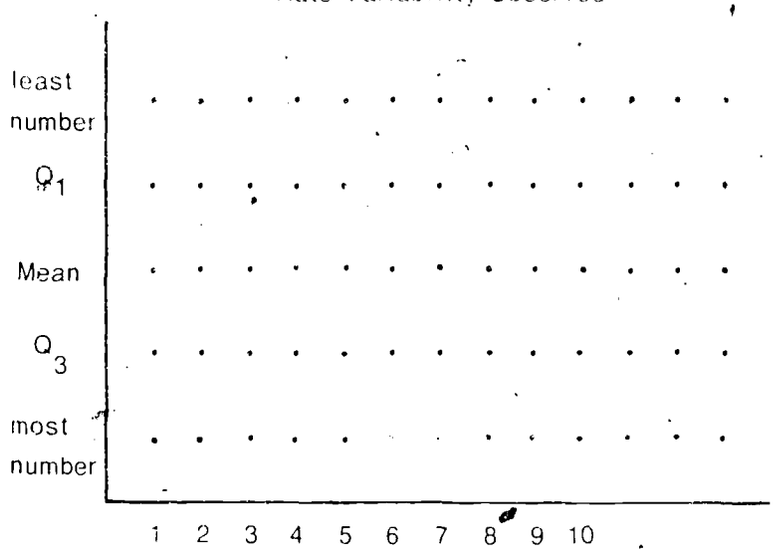
If a large dotted circle is shown (as in slide 26), that is color coded according to who determines that that set of units is required.



The rectangle for Planning Sessions Held is color coded to who participates in these planning sessions: learner (red), instructor (blue), or program (yellow). If these sessions are joint meetings, this is reflected by the appropriate coloring. If the planning sessions are regularly scheduled, the circle is colored green.

RATE

Rate Variability Observed

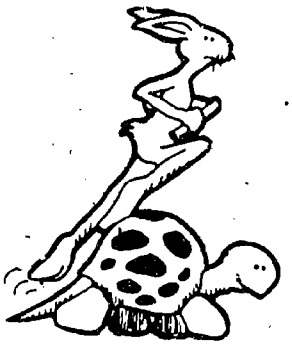


Planning Sessions

Held — Scheduled Regularly

Slides: 27 28 29 30 31

RATE

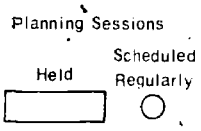


The Rate component (slides 27 to 31) examines the relative lengths of time learners spend with the instructional program. The rate at which a learner passes through a program depends both on the variety of options the program makes available to him and on the speed at which he works. The Rate component measures the extent of variation in learner progress which results from a combination of program options and individual differences.

The graph relates learner progress through the program to the number of units (however defined for each program) completed. Results shown may be for a sample of learners or for an entire population. The five lines indicate the number of units completed by the slowest and the fastest single learners observed, together with three intermediate measures: the first and third quartiles and the mean of the number of units completed by all learners. The numbers shown as "Numbers of Units Completed" are intended to provide only a relative scale of the units completed by the learners.

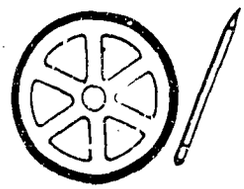
Color Coding

Horizontal bars are drawn using color to indicate who determines the rate at which learners progress: learner (red), instructor (blue), and program (yellow). These decisions include when to start a new unit, when to take a test to leave a unit and when each unit is completed. If the decisions are shared, this is reflected by the coloring.



The rectangle for Planning Sessions Held is color coded to who participates in these planning sessions: learner (red), instructor (blue), or program (yellow). If these sessions are joint meetings, this is reflected by the appropriate coloring. If the planning sessions are regularly scheduled, the circle is colored green.

MEDIA



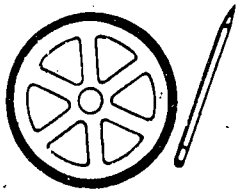
	Reading Materials	Audio–Visual Materials	Manipulative Materials	No Media
Percent of Instructional Time	7 6 5 4 3 2 1 Variety	7 6 5 4 3 2 1 Variety	7 6 5 4 3 2 1 Variety	7 6 5 4 3 2 1 Variety
Who Determines				
Information Used				

Planning Sessions

Held ☐ Scheduled Regularly ○

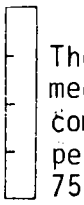
Slides: 32 33 34 35 36

MEDIA

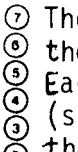


The Media component (slides 32 to 36) describes four different categories of media being used to present the subject matter to the learners and identifies the amount of time (as a percentage) learners spend with these four categories of media. The four categories of media are: reading materials, audio-visual materials, manipulative materials and learning situations where no media is used. Also shown for each media category is the variety of materials included in the category as well as who determines that learners will use these materials and whether recorded information is used in making these decisions.

Color Coding



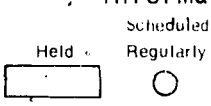
The percent of instructional time for each category of media is shown in green on the taller rectangles. The combined percent of these four rectangles should be 100 percent. The three hash marks represent the 25, 50, and 75 percent levels.



The appropriate numbered circles are colored green to show the variety of materials used within each media category. Each numbered circle refers to a specific kind of equipment (see page 73 of definitions) and should be colored only if that particular kind of equipment or learning situation is used. There are extra numbered circles for each media category that can be used for equipment or learning situations that are not mentioned on page 73.

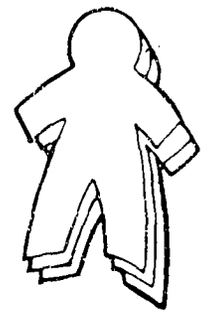
For each media category, there is a medium size rectangle that identifies who determines what materials or learning situations will be used by the learners. Who determines is color coded for learner (red), instructor (blue) and program (yellow). If the decisions are shared, proportional shares of the decisions are reflected by the coloring.

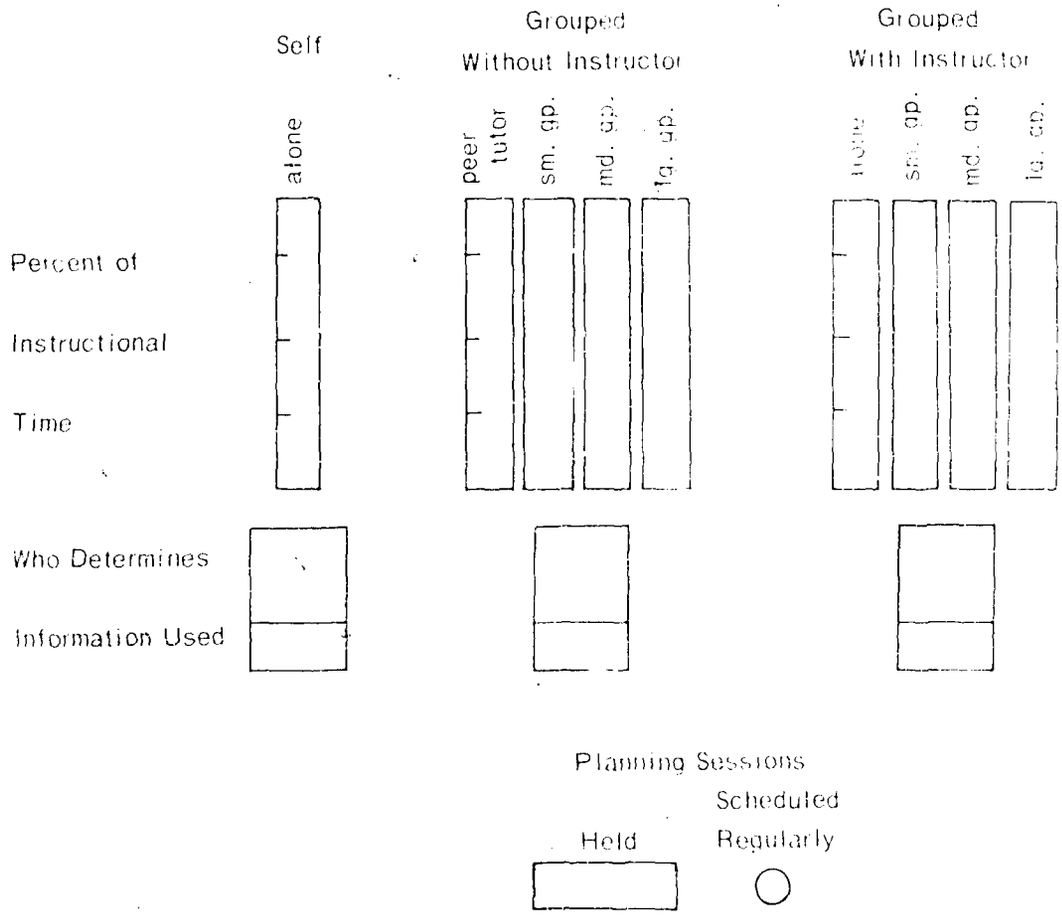
If recorded information is used in making decisions regarding the type of materials or learning situations to be used, green is shown in the appropriate smaller rectangle. The green showing that recorded information is used is colored in coordination with the coloring for Who Determines to indicate which of the participants in decision making use recorded information.



The rectangle for Planning Sessions Held is color coded to who participates in these planning sessions: learner (red), instructor (blue) or program (yellow). If these sessions are joint meetings, this is reflected by the appropriate coloring. If the planning sessions are regularly scheduled, the circle is colored green.

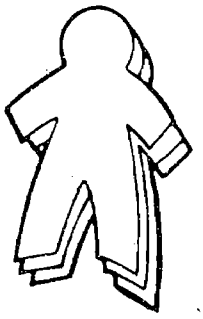
GROUPING





Slides: 37 38 39 40 41

GROUPING

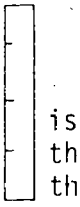


The Grouping component (slides 37 to 41) describes three categories of association with other individuals which learners experience within the program. These three categories are Self, Grouped Without Instructor and Grouped With Instructor. The component also identifies four size classifications for the latter two grouping categories: peer tutor or alone (1 to 1), small group (2-7), medium group (8-20), large group (21 or more). These sub-divisions create a total of nine category-size characteristics for describing grouping.

The use of these category-size characteristics is reported as a percentage of total instructional time.

Also shown for each of the three grouping categories (Self, Grouped Without Instructor, Grouped With Instructors) is who determines that learners will be grouped in these categories and whether recorded information is used in making these decisions.

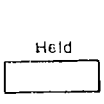
Color Coding



The percent of instructional time in groups of each category is shown in green on the taller rectangle. The combined percent of these nine rectangles should be 100 percent. The three marks represent the 25, 50, and 75 percent levels.

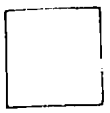
For each grouping category there is a medium rectangle that identifies who decides that a learner will be alone, grouped without the instructor or grouped with the instructor. Who determines is color coded for program (yellow), learner (red) and instructor (blue). If the decisions are shared, proportional shares of the decisions are reflected by the coloring.

If recorded information is used in deciding that a learner will be alone, grouped without the instructor or with the instructor, green is shown in the appropriate smaller rectangle. The green showing that recorded information is used is colored in coordination with the coloring for Who Determines to indicate which of the participants in decision making use recorded information.

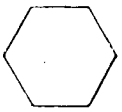


The rectangle for Planning Sessions Held is color coded to who participates in these planning sessions: learner (red), instructors (blue), or program (yellow). If these sessions are joint meetings, this is reflected by the appropriate coloring. If the planning sessions are regularly scheduled, the circle is colored green.

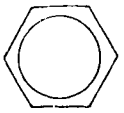
PROGRAM PATTERN



Activity

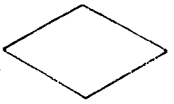


Test



Other Assessment

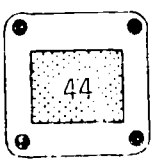
Recorded Assessment



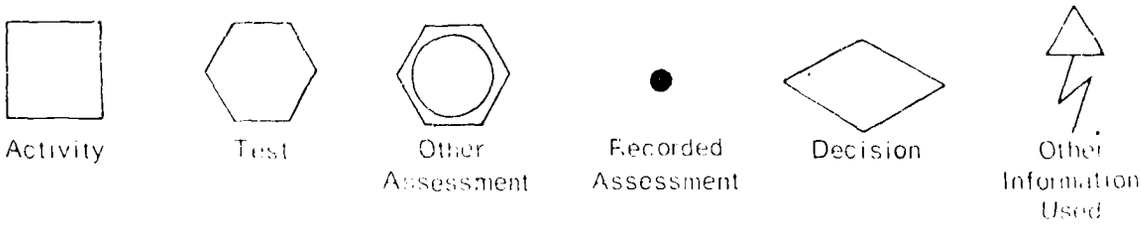
Decision

Other Information Used

Slides:



PROGRAM PATTERN



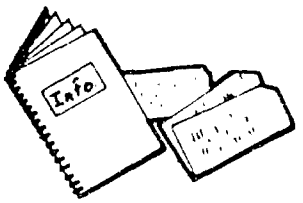
The Program Pattern component (slides 42 to 45) describes the learner's progress through an instructional unit. The intent of this component is to describe the instructional procedures which are repeated for each unit. It offers two features not included in other components. It describes the possible flow of the instructional procedures followed by a learner. It also indicates the relationship between a learner's instructional activities and the assessment which may follow or precede these activities.

Flowchart symbols trace the sequence of instructional procedures available to a hypothetical learner. Because the intent of the component is to provide a description which could apply to each learner's progress through a unit in the program, a flowchart is used. The flowchart may, for example, indicate options to by-pass instructional activities if those options are available. This component highlights the placement and determination of decisions as a part of the program, by color coding the decision symbol in order to show whether the choice is made by learner, instructor or program, or a combination of these.

Color Coding

The Decision symbol ( ) is the only symbol in this component which is color coded. This is color coded to identify the decision makers: learner (red), instructor (blue), or program (yellow). If the decisions are shared, proportional shares of the decision are reflected by the coloring.

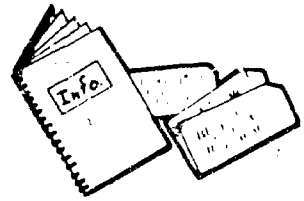
RECORD OF INFORMATION



Storage Form	Information About Learners: Learner Assessment: Skills & Concepts	Attitudes & Interests	Construction Making	Interpersonal Relating	Learner Use of Program Options: Objectives	Assessment	Sequence	Rate	Media	Grouping	Information About Program: Instructors: Content Interest	Teaching Style Preference	Option Availability: Objectives	Assessment	Sequence	Rate	Media	Resources
computer	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
record file	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
portfolio	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
other	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Slides:

RECORD OF INFORMATION



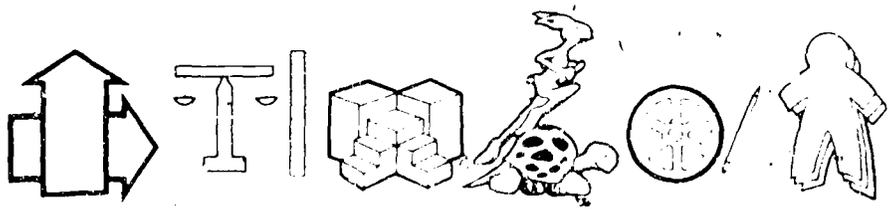
The Record of Information component (slides 46 to 50) relates the manner in which the program stores information both about the learners and about the program. Types of information about the learners are separated into two major classifications: Learner Assessment and Learner Use of Program Options. Types of information about the program are separated into two major classifications: Instructors and Option Availability. These classifications are further categorized. Storage forms are established for each category of information. The storage forms identified are: computer, record file, portfolio and other.

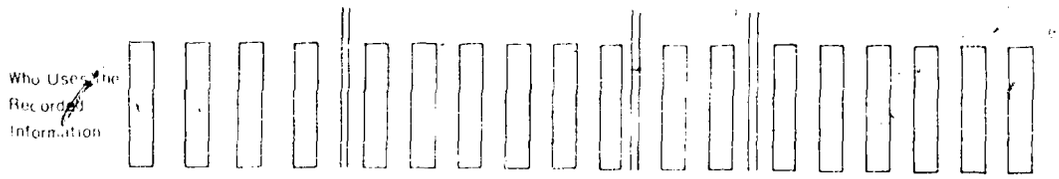
Color Coding

○ ○
○ ○
○ ○

All circles are colored in green. If information of one of the categories is kept in a particular storage form, the appropriate circle is entirely colored in. If some category of information is kept in more than one storage form, the appropriate circles are filled in.

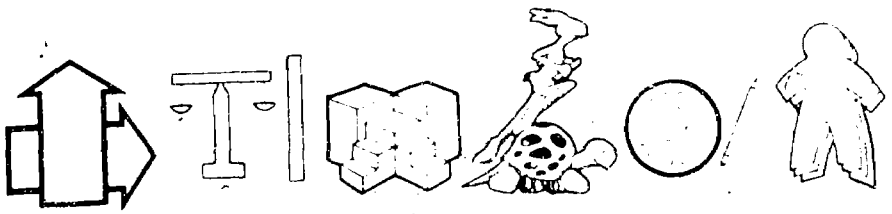
USE OF INFORMATION





Slides:

USE OF INFORMATION



The Use of Information component (slides 51 to 55) relates what recorded information is used by the participants of the program for program decisions. The categories of information are identical to the categories listed in the Record of Information component and can be read from that component by reading down. The rectangles are color coded to show who uses the particular categories of recorded information for making program decisions.

Color Coding

The appropriate rectangles are colored to show who uses the particular categories of stored information for program decisions: learner (red), instructor (blue) or program (yellow). When applicable, these rectangles may include more than one color and in the appropriate proportional shares. If a particular category is seldom used in program decisions, this may be shown by only partially filling in the rectangle with the appropriate color (or colors). If a particular category is not used, then no color should appear in that rectangle. Color should not appear in a rectangle if information in that category is not shown to be stored in the Record of Information component.

illustrative questions

On the following pages are sample questions addressed by each component of the Descriptor. These questions are meant to introduce those features of instructional programs that are examined by each of the ten Descriptor components. It is suggested that the questions stated for each component be considered along with the numbered slides included in this guide. The slides are provided to show how different answers to these basic questions are graphically portrayed on the component.

For each component there are two pages included in this section. The first, or left-hand page shows questions which that component attempts to answer. On the second, or right-hand page, are sample answers to these questions as they are portrayed on a number of slides (from three to six) showing representative responses of different instructional programs. If, after looking at these two pages and referring to the representative slides for a component, there is still some doubt about the terminology or graphic representations of that component, it is suggested that the user then go to section C which contains definitions of each term in the component as well as a more extensive verbal description of each slide.

PROGRAM CONTEXT
ILLUSTRATIVE QUESTIONS

Question 1.

IS THE PROGRAM CURRENTLY IN OPERATION?

Question 2.

WHAT ARE THE GENERAL CHARACTERISTICS OF THE PROGRAM?

Question 3.

FROM WHOM ARE THE DATA BEING COLLECTED?

PROGRAM CONTEXT

SAMPLE RESPONSES

SLIDE 8

QUESTION 1.	QUESTION 2.	QUESTION 3.
yes	math, grades 7-9, commercial, one textbook, changing groups, time scheduled/fixed, open classroom, team teaching, teacher aides	instructors & administrators

SLIDE 9

no	reading, grades K-5, locally produced, modules, learners alone, time unscheduled, single classrooms, self-contained	instructors

OBJECTIVES

ILLUSTRATIVE QUESTIONS

Question 1.

WHAT DIFFERENT KINDS OF OBJECTIVES ARE INCLUDED IN THE PROGRAM?

Question 2.

TO WHAT EXTENT ARE THE OBJECTIVES DIFFERENTIATED AMONG LEARNERS?

Question 3.

WHO IDENTIFIES THE OBJECTIVES FOR A GIVEN LEARNER?

Question 4.

IS RECORDED INFORMATION USED IN DETERMINING APPROPRIATE OBJECTIVES FOR LEARNERS?

Question 5.

ARE PLANNING SESSIONS HELD TO IDENTIFY AND DETERMINE THE APPROPRIATE OBJECTIVES?

SAMPLE RESPONSES

SLIDE 11

QUESTION 1	QUESTION 2	QUESTION 3	QUESTION 4	QUESTION 5
skills & concepts	same for all	program	no	no

SLIDE 12

construction making	same for all	instructor	no	no

SLIDE 13

skills & concepts	different for groups	instructor	no	yes, for instructors & are regularly scheduled
interests & attitudes	same for all			

SLIDE 14

skills & concepts	some for all some by group some by individuals	program, instructors & learners	yes, for skills & concepts	yes, for learners & instructors & are regularly scheduled
interests & attitudes	same for all			
construction making	by individuals			

LEARNER ASSESSMENT PROCEDURES

ILLUSTRATIVE QUESTIONS

Question 1.

LEARNERS ARE ASSESSED ON WHAT KINDS OF PROGRAM OBJECTIVES?

Question 2:

WHAT PROCEDURES ARE USED FOR ASSESSING LEARNERS?

Question 3.

RESULTS ARE RECORDED FROM WHAT KINDS OF ASSESSMENT PROCEDURES?

Question 4.

WHO DETERMINES WHAT (AND WHEN) CERTAIN LEARNER ASSESSMENT PROCEDURES ARE TO BE USED?

Question 5.

ARE PLANNING SESSIONS HELD TO DETERMINE THE APPROPRIATE ASSESSMENT PROCEDURES USED FOR LEARNERS?

SAMPLE RESPONSES

SLIDE 16

QUESTION 1.	QUESTION 2.	QUESTION 3.	QUESTION 4.	QUESTION 5.
skills & concepts	unit post-tests	post-tests	instructor	no

SLIDE 17

skills & concepts	unit pre-tests, mid-tests, post-tests; conferences; products; other observations	pre & post-tests, conferences, products, other observations	instructors, learners & program	yes, for instructors & learners & occur regularly

SLIDE 18

skills & concepts interests & attitudes construction making	conferences, products	conferences, sometimes products	instructors & learners	no

SLIDE 19

skills & concepts interests & attitudes interpersonal relations	unit pre-tests, post-tests; conferences, other observations	pre & post-tests, conferences, other observations	instructors, learners & program	yes, for instructors & occur regularly

SEQUENCE

ILLUSTRATIVE QUESTIONS

Question 1.

IN WHAT ORDER OR SEQUENCING PATTERN ARE THE UNITS OF INSTRUCTION STUDIED BY LEARNERS?

Question 2.

WHO DETERMINES THE SEQUENCING OF UNITS?

Question 3.

ARE PLANNING SESSIONS HELD TO DETERMINE THE APPROPRIATE SEQUENCING OF UNITS?

SAMPLE RESPONSES

SLIDE 21

QUESTION 1	QUESTION 2	QUESTION 3
linear	program	no

SLIDE 22

branched	program, instructors and learners	yes, for instructors, but not regularly scheduled

SLIDE 23

branched	program, instructors and learners	no

SLIDE 24

network	learners and instructors	yes, for learners and instructors, but not regularly scheduled

SLIDE 25

non-specified	mostly learners: a few units chosen by instructors or program	no

SLIDE 26

linear and non-specified	learners choose the order within certain sets of units: first set of units identified by program, second set by instructors	no

RATE

ILLUSTRATIVE QUESTIONS

Question 1.

TO WHAT EXTENT DO DIFFERENT LEARNERS VARY IN THEIR RATE OF PROGRESS THROUGH THE PROGRAM?

Question 2.

WHO DETERMINES THE LEARNER RATE OF PROGRESS?

Question 3.

ARE PLANNING SESSIONS HELD TO DETERMINE THE APPROPRIATE LEARNER RATE OF PROGRESS?

SAMPLE RESPONSES

SLIDE 28

QUESTION 1.	QUESTION 2.	QUESTION 3.
no variance	instructor	no

SLIDE 29

wide variance	learners	no

SLIDE 30

groups vary	instructors	yes, for instructors and are regularly held

SLIDE 31

little variance except for slowest & fastest learners	program for most learners instructor for slowest learners learners for fastest learners	yes, for instructors but not regularly held

MEDIA

ILLUSTRATIVE QUESTIONS

Question 1.

TO WHAT EXTENT ARE DIFFERENT CATEGORIES OF INSTRUCTIONAL MEDIA USED IN THE PROGRAM?

Question 2.

WHAT IS THE VARIETY OF MATERIALS OR LEARNING SITUATIONS USED WITHIN EACH CATEGORY OF MEDIA?

Question 3.

WHO MAKES THE DECISIONS ABOUT WHAT MEDIA WILL BE USED BY A LEARNER?

Question 4.

IS RECORDED INFORMATION USED IN MAKING THESE DECISIONS?

Question 5.

ARE PLANNING SESSIONS HELD TO DETERMINE THE APPROPRIATE MEDIA FOR LEARNERS?

SAMPLE RESPONSES

SLIDE 33

QUESTION 1	QUESTION 2	QUESTION 3	QUESTION 4	QUESTION 5
reading - 90% audio-visual - 3% manipulative - 3% no media - 4%	textbook, worksheets; films; games; lectures	mostly program, some instructors & learners	no	no

SLIDE 34

reading - 50% no media - 50%	multi-texts, workbooks, instr. written mtls., learner written mtls., other reading mtls.; class discussions	learners & instructors	yes, by learners & instructors	yes, for both learners & instructors & are regularly scheduled

SLIDE 35

reading - 20% audio visual - 20% manipulative - 60%	instr. written mtls., other reading mtls.; films, filmstrips, audio tapes, overhead transparencies; bldg. tools, games, flat mtls., solid mtls., other manipulative mtls.	learners & instructors	yes, by learners for audio-visual materials	yes, for both learners & instructors are regularly scheduled

SLIDE 36

reading - 25% audio-visual - 25% manipulative - 25% no media - 25%	multi-texts, workbooks, instr. written mtls., learner written mtls.; filmstrips, audio-tapes, bldg. tools, games; discussions, lectures, meditation	learners & instructors	yes, mostly by instructors, occasionally by learners	yes, for both learners & instructors & are regularly scheduled

GROUPING

ILLUSTRATIVE QUESTIONS

Question 1.

TO WHAT EXTENT DO LEARNERS SPEND THE INSTRUCTIONAL TIME ALONE?

Question 2.

TO WHAT EXTENT DO LEARNERS SPEND THE INSTRUCTIONAL TIME WORKING IN PEER GROUPS WITHOUT AN INSTRUCTOR?

Question 3.

TO WHAT EXTENT DO LEARNERS SPEND THE INSTRUCTIONAL TIME WITH AN INSTRUCTOR?

Question 4.

WHO MAKES DECISIONS ABOUT WHAT GROUPING CATEGORIES WILL BE USED?

Question 5.

IS RECORDED INFORMATION USED IN MAKING THESE DECISIONS?

Question 6.

ARE PLANNING SESSIONS HELD TO DETERMINE THE GROUPING CATEGORIES OR SIZES FOR LEARNERS?

SAMPLE RESPONSES

SLIDE 38

QUESTION 1.	QUESTION 2.	QUESTION 3.	QUESTION 4.	QUESTION 5.	QUESTION 6.
95%	0%	5%	program, instructor, learner (occasionally)	no	no

SLIDE 39

19%	0%	81% alone-1% lg. grp.-80%	instructors	only for being alone with instructors	yes, for instructors & are regularly scheduled

SLIDE 40

25%	45% peer tutor: 15% sm. grps.: 30%	30% sm. grps.: 20% md. grps.: 10%	instructors & learners	no	yes, for instructors & are regularly scheduled

SLIDE 41

30%	48% peer tutor: 8% sm. grps.: 15%	22% alone: 7% sm. grps.: 15%	instructors & learners	yes, most of the time	yes, for learners & instructors & are regularly scheduled

PROGRAM PATTERN

ILLUSTRATIVE QUESTIONS

Question 1.

IS A PREPLANNED PATTERN OF WORK-STUDY, ASSESSMENT AND DECISION-MAKING REPEATED AS LEARNERS PROGRESS THROUGH THE INSTRUCTIONAL UNITS?

Question 2.

WHAT IS THIS PREPLANNED PATTERN?

Question 3.

ARE THERE POSSIBILITIES FOR A LEARNER TO BYPASS CERTAIN ACTIVITIES OR BE REROUTED THROUGH CERTAIN ACTIVITIES?

Question 4.

WHO MAKES THE DECISIONS IN THE PATTERN DESCRIBED?

SAMPLE RESPONSES

SLIDE 43

QUESTION 1	QUESTION 2	QUESTION 3	QUESTION 4
yes	decision, work-study, activity, post-test, decision	by-pass -- no re-route -- yes	program & instructors

SLIDE 44

yes	pre-test, decision, work-study, activities, decision, post-test, decision	by-pass--yes re-route--no	program, instructors & learners

SLIDE 45

yes	prospectus, decision, pre test, other recorded information used, decision, work-study activities, decision, post-test, conference, decision	by-pass -- yes re-route -- yes	instructors & learners

RECORD OF INFORMATION

ILLUSTRATIVE QUESTIONS

Question 1.

WHAT KIND OF INFORMATION IS STORED ABOUT THE LEARNERS?

Question 2.

WHAT KIND OF INFORMATION IS STORED ABOUT THE PROGRAM?

Question 3.

WHAT KIND OF STORAGE FORMS ARE USED TO KEEP INFORMATION?

RECORD OF INFORMATION

SAMPLE RESPONSES

SLIDE 47

QUESTION 1	QUESTION 2	QUESTION 3
skills & concepts	none	record-file

SLIDE 48

skills & concepts, interests & attitudes construction making interpersonal relations	none	computer record-file portfolio

SLIDE 49

skills & concepts interests & attitudes interpersonal relations learner's rate of progress	options in: objectives sequence media	record-file other storage form

SLIDE 50

skills & concepts, interests & attitudes construction making interpersonal relations learner choice of: objectives, assessment rate of progress, media	instructors': special content interests, teaching style preference options in: objectives, assessment, sequence, rate of progress, media, grouping	computer record-file portfolio other storage form

USE OF INFORMATION

ILLUSTRATIVE QUESTIONS

Question 1.

WHAT KINDS OF RECORDED INFORMATION ARE USED TO MAKE DECISIONS WITHIN THE PROGRAM?

Question 2.

WHO USES THESE KINDS OF RECORDED INFORMATION?

SAMPLE RESPONSES

SLIDE 51

QUESTION 1	QUESTION 2
none	

SLIDE 52

assessment of: skills & concepts interests & attitudes construction making interpersonal relations	instructors

SLIDE 53

assessment of: skills & concepts interests & attitudes interpersonal relations learner rate of progress options in: objectives, sequence, media	instructors & learners

SLIDE 54

assessment of: skills & concepts interests & attitudes construction making interpersonal relations learner use of: objectives, assessment, rate, media instructors': content interests, teaching style preference options in: objectives, assessment sequence, rate, media, grouping	instructors & learners

SLIDE 55

assessment of: skills & concepts options in: sequence	instructors & learners

definitions

On the following pages are definitions of all the terms used for each component on the Descriptor. Also included for each component are extensive verbal descriptions of the graphic representations that are shown on the slides. The definitions and verbal descriptions of the slides are organized component by component for easy reference.

PROGRAM CONTEXT

DEFINITIONS

DEFINITIONS

In deciding how to describe a given program, the following terms should clarify possible ambiguities. The terms appear here in the order in which they are found in the component.

PROGRAM STATUS

Functioning program. A functioning program is a program that is currently in operation. Information about a functioning program may be obtained from interviews with participants in the program, together with direct observations of the program in operation.

Ideal program. An ideal program is normally not currently in operation in the form in which it is being described. Information about an intended program may be obtained from interviews with persons who have formulated or are formulating the details of a program. Interviews may be with teachers, school administrators or supervisors.

PRODUCTION AGENCY

Local schools. The program was developed on site by faculty and staff of the institution in which the program is implemented.

Educational agency. The program was developed by a non-profit group working with and for schools (such as a State Department of Public Instruction or a nationally funded Research and Development Center). The program may be intended for use by many schools.

Commercial agency. The program was developed by a profit-making group, to be marketed to schools as a commercial venture.

PACKAGING

Modules. The program is organized into self-contained units. Each unit may use or access a variety of instructional modes with considerable variation for individual learners, but the module is the organizational unit for program operation.

Tests. The program employs a set of tests to establish the organizational basis of the program. Mastery of tests are used to establish learner progress.

Multi-texts. A variety of texts or other commercial materials provide the basis for the program. No one text serves as the principal organizing factor.

Text. One text forms the basis for the program.

LEARNER ARRANGEMENT

Alone. The program is designed in such a way that learners are engaged in self-study most of the time.

Fixed groups. The program provides for group instruction, with groups being established infrequently (perhaps only once in an academic year). The group then serves as the focus of instruction.

Changing groups. The program provides for some group instruction, with groups changing during the instructional period for reasons such as interest, variety, mastery.

LEARNER TIME

Unscheduled. Learners may work on the program at whatever time during the day they wish. There is no specified time when a learner must be at work on any given aspect of the program.

Scheduled/fixed. Definite times during the day or week are set in a school's schedule for the operation of the program. Learners assigned to the program must work within the program for that time.

Scheduled/flexible. Definite times during the day or week are set in a school's schedule for the operation of the program. In addition to these scheduled times, learners are granted some flexibility. Learners may be able to work on the program at other non-scheduled times or they may choose in some cases not to work on the program during the scheduled times.

SPACE ARRANGEMENT

Open. Open defines a single space without walls which is larger in size than the single, conventional classroom.

Multiple rooms. More than one room is used to house the program. Rooms may be conventional classrooms or encompass a number of classrooms or special purpose rooms.

PROGRAM CONTEXT

Single room. The entire program takes place at one location, no larger in size than a traditional classroom.

STAFF ARRANGEMENT

Teacher. A single teacher in his or her own classroom is responsible for all planning and instructional activity.

Teacher group. Several teachers work with a group of learners. Planning is cooperative. Specific responsibilities may be rotated or constant, but there is some differentiation of responsibility at any given time.

Specialist(s). A person with training and responsibility which differs from that of other teachers who work with the program.

Aide(s). A person with specially designated clerical or tutorial responsibilities who works under the direction of teachers in the program.

SOURCE OF DATA

Instructor. Information about the program has been gathered from the persons who are doing or expected to be doing the teaching.

Learners. Information about the program has been gathered from the persons who are the students.

Administrators/Supervisors. Information about the program has been gathered from the persons who are responsible but not working directly with the program (for example, principals, deans or curriculum specialists).

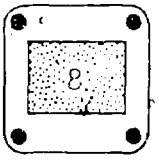
Developers. Information about the program has been gathered from the persons who have designed the program.

Materials. Information about the program has been gathered from teacher guides, articles or other written forms which describe a program.

Other. Information about the program has been gathered from people or situations not mentioned in the above categories (for example, parents or films).

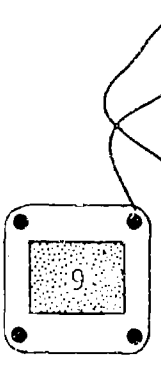
PROGRAM CONTEXT
EXTENDED VERBAL DESCRIPTIONS OF SLIDES 7—9

Program Context component not colored in.



Program being described is presently functioning within a classroom. It is a mathematics program, covering grades 7 through 9, it has been designed by a commercial agency and is based upon a single textbook series. Learners are arranged in changing groups and the time for mathematics is scheduled and fixed for the learners. The program is located in a school designed with open classrooms and the program is being used by instructional teams with an instructional aide for each team.

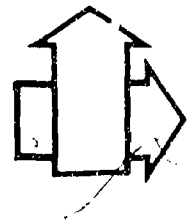
The data collected to describe the functioning program has been gathered from the instructors and from the school principal.



The program being described is not yet in operation but is an ideal program of a group of instructors. It is an ideal reading program for grades K-5 that the instructors are currently attempting to design. The instructors are planning to design the program into modules or packages of specific instructional materials that address specific reading skills.

This ideal program is being designed for learners to use basically by themselves and the time for the use of these reading materials will be entirely left up to the learners. The school is arranged in single classrooms and the teachers work within their own self-contained classroom.

OBJECTIVES



DEFINITIONS

CATEGORIES OF OBJECTIVES

Skills and Concepts. Skills and concepts are often referred to as the content or the subject matter of instruction. These may be expressed in behavioral terms or by some other method of identifying the concepts or skills which the program is designed for the learner to attain.

Interests and Attitudes. Interests and attitudes are the feelings and emotions which a person has. In a school setting, these may include the interests and attitudes which a learner has towards certain schooling tasks, program goals and himself.

Construction Making. Constructions are tangible and concrete products which are created by a person. The emphasis here is on the creative activity of the learners. Products in different subjects may look quite different, ranging from picture books made by learners to drama productions, from mathematical models to the making of games, from term papers to video tapes of certain learner activities.

Interpersonal Relations. Interpersonal relations are the ways a person conducts himself with other people. These relations may include how a learner treats other people, works, plays, or reacts with other people in specific situations.

WAYS OF IDENTIFYING OBJECTIVES WITH LEARNERS

Same for all. Objectives are assigned without differentiation among learners. All learners within a program are identified with the same objective.

Differentiated for groups. Objectives are identified with different groups of learners within a program. Common objectives may be identified for groups that are classified on such categories as (1) aptitude and/or achievement, (2) sex, age, ethnic classifications, or (3) interest.

Differentiated for individuals. Objectives are individually prescribed for each learner. Assignments to objectives could be made on the basis of individual choice, needs assessment by program and individual, or as a part of the instructional activity.

USE OF INFORMATION

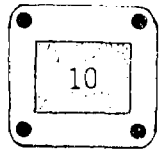
The Information Used Scale provides an indication of the degree to which objectives are identified to a learner or group of learners on the basis of some recorded information.

PLANNING SESSIONS

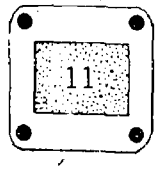
Held. Planning sessions are meetings that are held in order to state specific program objectives to identify these objectives to specific learners or groups of learners. The sessions may include instructors only or learners and instructors or learners only and are colored accordingly.

Regularly Scheduled. These meetings are an integral part of the instructional program and are scheduled or held regularly (at least twice a semester) within an instructional year.

EXTENDED VERBAL DESCRIPTIONS OF SLIDES 10—14

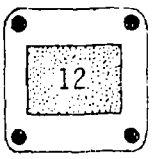


Objectives component not colored in.



The objectives of this program are directed towards the learning of specific skills and concepts, are the same for all learners and are determined by the program.

Planning sessions are not held to determine the objectives of the program.



The objectives are directed towards the learners creating a specific product by the end of the instructional program (for example, a term paper). The nature of this final product is determined by the instructor and is the same kind of product for all learners.

Planning sessions are held but not regularly scheduled. For example, it could be that one planning session per semester is held by the teachers to determine what particular product will be required for that semester's work.

Both the concepts and the attitudes towards which the program is directed have been determined by the instructors.

Planning sessions are held and regularly scheduled. For example, there could be planning sessions held about once every two weeks for the teacher to discuss particular concepts and attitudes that have been identified as objectives. In these planning sessions, new objectives are often determined.

The program objectives include the learning of specific concepts as well as the identification of certain positive attitudes towards learning and themselves. The concepts expected to be learned are different for different groups of learners, but the positive attitudes towards which the program is directed are the same for all learners.

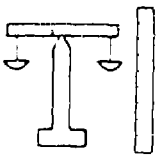
This program is directed towards specific skills, attitudes and learner constructions. About one-third of the skills identified are to be taught to all learners (and these are determined by the program) about one-third of the skills are different for different groups of learners (as determined by the instructors) and about one-third of the skills are chosen for individual learners (the learners do

the choosing of these skills). Those objectives identified for groups and for individuals are done with the help of recorded information about the learners' past performance. The attitudes towards which the program is directed are the same for all learners as determined by the instructors. The constructions that the learners are to complete in this program are identified with individual learners and are jointly determined by both instructors and learners.

Recorded information about the available options in the program is used by both learners and instructors in identifying these constructions for each learner.

There are planning sessions held in which the learners and the instructor decide what constructions each learner will produce. These sessions are scheduled regularly in order for each student to meet with the instructor, for example, at least once a month.

LEARNER ASSESSMENT PROCEDURES



DEFINITIONS

INFORMATION ABOUT EACH LEARNER

Skills and Concepts. Skills and concepts are often referred to as the content or the subject matter of instruction. Information may be obtained about the skills and concepts which a learner possesses at a certain time.

Interests and Attitudes. Interests and attitudes are the feelings and emotions which a person has. Information may be obtained about the interests and attitudes which a learner has towards schooling tasks, program goals and himself.

Construction Making. Constructions are tangible and concrete products which are created by a person. Products in different subjects may look quite different, ranging from picture books made by learners to drama productions, from mathematical models to the making of games, from term papers to videotapes of certain learner activities. Information may be obtained about the creativity and productiveness of a learner.

Interpersonal Relations. Interpersonal relations are the ways a person conducts himself with other people. Information may be obtained about how a learner treats other people, works, plays or reacts with other people in specific situations.

PROCEDURES FOR ASSESSING LEARNERS

Assessment information may be secured in a variety of ways. The indicators at the top of each of the four columns signal whether any information of that type is obtained for learners. Greater detail on the source of the information is presented in the column. Four types of procedures for gathering information are examined.

Testing. The program may include a number of options for assessment as a learner progresses through a unit. The designations in this category apply to assessment devices applied within the instructional units in the program.

Pre. Pretests are taken by the learner prior to engaging in instructional activities for a unit. For example, the intent of a pretest based for skills and concepts is to determine the learner's readiness for the unit or his prior knowledge of the information contained in the unit.

Mid. Midtests include any assessment of the learner undertaken while he is engaged in the study of a unit. For example, the intent of a midtest used for skills and concepts covers the material contained within that unit.

Post. Post tests are taken by the learner at the conclusion of a unit. For example, the intent of a post test used for skills and concepts is mastery of the material studied.

Conferences. Direct conversations between learner and instructor or staff may be a part of assessment procedures. When the intent of the conference is to review learner progress or determine learner needs, it may be cited here as an assessment activity.

Products. When work done by the learner is directly examined to assess learner progress, products may be considered part of assessment procedures. Products may include such diverse items as video-tapes of learner performance in a teaching role, murals, models or costumes. Like other assessment activities, this product may or may not be recorded or kept.

Other Observations. Other observations which might be a part of assessment includes other direct observations of the learners in progress either by the teacher or other professional. It could also include general IQ or achievement testing; records of concepts, skills, products or attitudes which the learner has shown outside of school: vocational interests or family background.

PLANNING SESSIONS

Held. Planning sessions for Learner Assessment Procedures refer to those meetings that are held in order to identify the appropriate procedures for the assessment of specific learners in order to obtain certain categories of information. These sessions may include instructors or learners or both.

Regularly Scheduled. These meetings identifying appropriate learner assessments are an integral part of the instructional program and are held regularly (at least twice a semester) within an instructional year.

LEARNER ASSESSMENT PROCEDURES

EXTENDED VERBAL DESCRIPTIONS OF SLIDES 15—19

Learner Assessment Procedures component not colored in.

The only learner assessments included in this program are post unit tests for the assessing of learner skills. The nature of these tests as well as the requirements of these tests are determined by the teachers. These post tests are recorded. No planning sessions are held to discuss or decide different assessment procedures.

NOTE: This slide may be considered to be complementary to slide 11, although there may also be programs with objectives similar to those portrayed by slide 12 and 13 for which this picture of learner assessment is also applicable.

The learners' skills and concepts are assessed in a variety of ways. Unit pre-tests, mid-tests, and post-tests are given. The unit pre and post-tests are required by the program and unit mid-tests may be taken or not taken depending upon the learner's choice. Conferences with instructors are also held periodically to assess the nature of each learner's grasp of the skills and concepts. Sometimes these conferences are requested by the learners, sometimes they are determined to be necessary by the instructor. Student made products (for example, worksheets, term papers, or other projects) are used to assess the extent to which the learners can apply certain skills and concepts. These products are sometimes required by the program, sometimes suggested by the instructor and sometimes chosen by the learner. Other observations include standardized achievement tests, taken about twice a year (program determined) and teacher designed tests taken quarterly. The assessments resulting from the pre and post tests, conferences, products and other observations are recorded. The mid-unit tests are not recorded.

Planning sessions occur to determine the nature and form of certain products to be used for learner assessment. These sessions sometimes include only the instructors and sometimes learners and instructors. These sessions are not formally scheduled but they do occur frequently, for example about once a month for each learner.

18

In this program, conferences and products are used to assess the learners. Conferences with instructors are used to assess those attitudes of learners that were identified as being included in the program objectives. The assessment from these conferences is occasionally recorded. The use of these conferences is determined by the instructors. Products are used to assess the skills that a learner has acquired (this is always recorded) as well as the learners' creativity and productiveness towards which the program objectives were also directed (this is sometimes recorded). The nature of these products that are used for assessment is determined by the individual student.

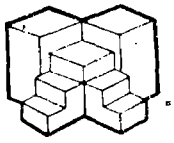
No planning sessions are held to discuss or decide on appropriate assessment procedures for learners. For example, the learner decides what is to be produced and then informs the instructor of his decision.

19

Skills and concepts, interests and attitudes and interpersonal relations of the learners are assessed in this program. Skills and concepts are assessed by unit pre and post-tests. The necessity and design of these tests are built within the program and are determined to be taken by the instructors. Included within these pre and post tests are questions relating to specific learner interests, attitudes that are included in the objectives of the program. Since this program is also directed towards encouraging certain abilities of the learners in getting along with themselves and each other, there is also some assessment of the learners' interpersonal relations. This assessment includes teacher conferences and other observations such as conferences with the school social worker and teacher observations of class behavior. These conferences and other observations are determined by the instructors most of the time but occasionally the learners may request a conference or observation for assessment. The results from all of these assessments are recorded.

Planning sessions are held in which instructors discuss the results and determine the appropriate methodologies for assessing different learners' interpersonal relations. These meetings are regularly scheduled, for example, about once a week.

SEQUENCE



DEFINITIONS

SEQUENCE PATTERNS

Four patterns of sequencing have been identified as representative of the range of possible sequences for required study:

Linear. (See slide 21) Learners follow a specified progression of units. Choices or variations in the specified sequence are unusual. Linearity is portrayed by one line connecting those units which have a specified order. This representation is read from left to right.

Branched. (See slides 22 and 23) Alternative paths are available to learners. Each time a choice is made among alternative units, that choice directs the learner to a progression of ordered units or topics. If after a unit is completed there is a choice of units, that choice is shown by more than one line coming out of the completed unit. Slide 22 shows one type of branched sequence and slide 23 shows another type.

Network. (See slide 24) Learners may proceed through units in a variety of ways. For each unit to be studied, there are usually alternative sets of required units. There are more alternative routes in a network sequence than a branched sequence.

Nonspecified Sequence. (See slides 25 and 26) Learners may proceed through units in any order. When there is no line between units, there is no suggested sequence of these units. Slide 25 shows one type of nonspecified sequence. Slide 26 shows a case where there is a set of required units to be completed but in no order before a second set of required units is to be completed.

PLANNING SESSIONS

Held. Planning sessions for this component refer to those meetings that are held to decide the appropriate sequence of units for specific learners. These meetings may include instructors or learners or both.

Regularly Scheduled. The meetings held to decide the appropriate sequence of units are an integral aspect to the instructional program. These meetings are held regularly (at least twice a semester) within the instructional year.

SEQUENCE

EXTENDED VERBAL DESCRIPTIONS OF SLIDES 20—26

Sequence Component not colored in. "Units" are represented by the circles. Connections between units are shown by lines. The sequencing is normally read from left to right.

Example of a linear sequence of unit(s). All units are taken in a specified order. This order is predetermined by the program.

No planning sessions are held to identify or discuss optional sequence possibilities.

Example of a branched sequence. The basis of the sequence of units is linear (as determined by the program) but there are some alternative sequences of units available to the learner. Some of these alternative units are determined by the instructor and some may be determined by the instructor and some may be determined by the learner.

Planning sessions are held to discuss optional sequence possibilities. These sessions involve the instructor but occur infrequently, for example, only about once a semester.

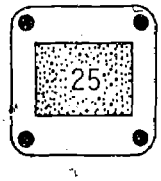
Another example of a branched sequence. The basis of this type of branching is the formal grouping of learners. All learners begin the first unit together but are then placed into one of three main streams. The sequencing of units within each of these three streams is basically "linear" and determined by the instructor. There are some learner choices of unit sequence for within the three main streams. Occasionally all learners will come together and study the same unit at the same time.

No planning sessions are held to specifically discuss or determine optional sequence possibilities. In this program the teacher decides the basic sequences alone.

An example of a network sequence. In the sequencing of units in this program, there are usually alternative sets of units which can be used as prerequisites for any given unit. In this sequencing pattern not only are there unit choices available after the completion of a unit, but there also exist alternative routes towards which specific units can be reached. In the network sequence shown here, the determination of specific unit sequences for a learner are mostly made by the learners and occasionally are made by both learners and instructors.

Planning sessions are held for determining those sequences of units which are determined by both the learners and the instructor. These planning sessions occur infrequently and are not scheduled.

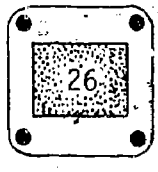
An example of a non-specified sequence. In this program there is no ordering of units, no units that are prerequisites for other units. In this type of sequencing, a particular unit can be taken at any time. The colors on the component show that most of the units are determined by the learner, some by the instructor and for a few units the program determines that they must be taken at a particular time.



Planning sessions to determine specific sequence are not held in this program.

NOTE: Some programs may have certain units that are "non-specified" in that they may be taken at any time and are not specifically related to the particular unit sequence pattern that is being used.

An example of a sequence pattern that is partly non-specified and partly linear. In this program there is a set of units which must be taken before a second set of units. Within each of these sets of units there is no specified or required order in which those units must be taken. The identification of the first set of units is determined by the program, as shown by the dotted line around these units. The determination of the order of the units within this first set is made by the



learners. The second set of units is determined by the instructor, as is shown by the dotted line around this set of units. The determination of the order of the units within this second set is made by the learners. There are some units (determined by the instructor) which are not a part of either of the two sets of units and may be taken at any time that the instructor decides is appropriate. There are two final units taken by all learners as determined by the program.

No planning sessions are held to determine specific sequences of units for learners.

RATE
DEFINITIONS

PLANNING SESSIONS

Held. Planning sessions for this componert refer to those meetings that are held to determine when to start new units, when to take the appropriate assessments to leave a unit or when a unit is completed. Those meetings may include instructors or learners or both.

Regularly Scheduled. The meetings held to determine the appropriate rates of unit completion are an integral aspect to the instructional program. Those meetings are held regularly (at least twice a semester) within the instructional year.

Number of Units Completed. The numbers shown represent a relative scale of units completed by learners in a specific period of time. There are two factors to consider when using these numbers as a scale. First, the numbers are only representative. For example, if the greatest number of units completed in a year's time is 20 and the least number is 2, then that could be represented by "10" and "1", respectively. Second, it is very important to use this scale for one specific time period. For example, if learner A has completed 5 units in one semester, and learner B has completed 10 units in two semesters, then their rate of progress is the same. To complete the graph it is necessary to make the time period the same for all learners in the program.

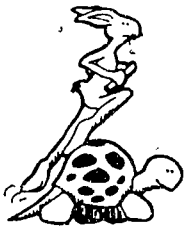
Least Number. The fewest number of units completed by a learner in the program within the chosen time period.

Q1. The first quartile of the number of units completed by the learners in the program within the chosen time period. Twenty-five percent of the learners have completed exactly this number of units or less.

Mean. The average number of units completed by the learners in the program within the chosen time period.

Q3. The third quartile of the number of units completed by the learners within the chosen time period. Twenty-five percent of the learners have completed exactly this number of units or more.

Most Number. The greatest number of units completed by a learner in the program within the chosen time period.



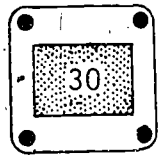
RATE
EXTENDED VERBAL DESCRIPTIONS OF SLIDES 27—31

Rate component not colored in.

All learners in this program progress through the program units together. At any given time, all learners will have completed the same number of units. The learners' rate of progress is determined by the instructor. The instructor decides when to begin a unit, when final test is to be taken by the learners and when a unit has been satisfactorily completed by a class.

No planning sessions are held to determine the rate of progress of learners.

Learners in this program progress through the units at their own rate. At any given time, there will be a wide range of the number of units completed by different learners. It is the learners who decide when to take a final test, when to leave a unit and when to enter a new unit. No planning sessions are held to determine the rate of progress of learners.



Groups of learners progress through this program at different rates. There are three groups of learners. Group A has completed the fewest number of units and includes "least number" and "01." Group B has completed the next number of units and includes "Median." Group C has completed the greatest number of units and includes "03" and "most number." The instructors determine what will be the rate of progress for each group.

Planning sessions are held among the instructors to discuss and determine the appropriate rate of progress for these groups. Although these meetings are not formally scheduled, they do occur regularly, for example, about once a month.

Most of the learners progress through the program at the same rate. This rate is determined by the program. There are a few slow learners, however, for whom the teachers allow and set a slower pace and there are a few of the fastest learners who are allowed to proceed at their own pace.

Planning sessions are held but not regularly scheduled. For example, it could be that one planning session is held at the beginning of the year in which the instructors determine what the normal program rate of progress will be.

MEDIA

DEFINITIONS

CATEGORIES OF MEDIA

The four general categories used to designate types of media represent aggregates of the many possible ways instruction can be presented. Following are the four general categories and representative media that each includes. The numbers in the parentheses refer to numbers in the circles on the Descriptor.

Reading and Writing Materials refers to duplicated or printed materials. Examples of Reading and Writing Materials are:

Text. (1) The written materials which are part of an adopted text or program.

Multitext. (2) Written materials from more than one program, or from alternative texts.

Programmed Material or Computer Terminal. (3) Written materials presented in a program format, whether linear or branching, on paper, teletype or screen.

Workbooks. (4) Use of printed materials with paper and pencil.

Instructor Written Materials. (5) Materials written by instructors which are read and used by other learners in the program.

Learner Written Materials. (6) Materials written by learners which are read and used by other learners in the program.

Audio Visual Materials are mechanical devices used to present information to learners. Examples of Audio Visual Materials are:

Films. (1) Reel or cassette.

Filmstrips. (2)

Audio-tapes (3) Reel or cassette

Records. (4)

Overhead projector. (5) Used to display previously prepared (perhaps commercial) overlays.

Video-tapes. (6) Reel or cassette.

Manipulative Materials denotes materials which the learner handles in the course of instruction. With these materials, instruction is seen as occurring through the manipulative process. Examples of Manipulative Materials are:

Building Tools. (1) Art materials, crafts, wood and metal and other expendable materials used for construction.

Games. (2) Puzzles and contests which are used for instruction.

Two Dimensional Materials. (3) Flannel boards, tanagrams, construction paper and other flat materials which are manipulated by learners.

Three Dimensional Materials. (4) Models, forms and solid materials which are manipulated by learners.

No Media describes instances when instruction is communicated principally without the use of media. Examples of instructional situations where materials are not the central focus of instruction are:

Discussions. (1) Learners gettings together with or without instructors for the purpose of communicating to each other. These may include seminars, conferences, or other situations where there is verbal information.

Lecture. (2) An instructor or learner giving information to a group of learners.

Meditation. (3) A learner searching through his own understanding, alone.

USES OF MEDIA

Percent of Instructional Time. The comparative amount of time that learners in the program spend with the four categories of media is shown by an approximate percentage for each category. The total percentage for the four categories should be 100 percent. The program profile shown by the four categories reflects the use of media by the entire group of learners in a program. It is a class use of media and does not address the issue of variation in media use by different learners within the program.

Who Determines. This identifies the participant in the program who makes the decisions that learners will use a particular category of media. The decision may be made by the program

as in instances where there are only those reading materials used that are included in the instructional package. The decision may be made by instructor as in instances where the instructor decides that a lecture ("no media") is to be used. The decision may be made by the learners as in instances where the learner may have a choice between listening to a tape or reading an article. Responsibility for those decisions may be shared, in which case an estimate of relative contributions to these decisions is shown.

Information Used. This identifies whether recorded information concerning the program or the learner is consulted in choosing specific categories of media for learners. Coupled with the graphics of the Who Determines rectangle, it also can identify which of the decision makers use recorded information.

Variety. Each numbered circle within the media categories represents a particular kind of instructional equipment (e.g., tape recorder) or kind of learning situation (e.g., discussion). For further explication see CATEGORIES OF MEDIA.

PLANNING SESSIONS

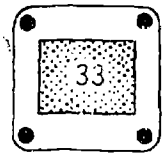
Help. Planning sessions for this component refer to those meetings that are held to determine which instructional media are appropriate for which learners. These meetings may also include scheduling the appropriate instructional materials to specific learners. These meetings may involve instructors or learners or both.

Regularly Scheduled. The meetings held to determine the appropriate media for specific learners are an integral aspect to the instructional programs. These meetings are held regularly (at least twice a semester) within the instructional year.

MEDIA

EXTENDED VERBAL DESCRIPTIONS OF SLIDES 32—36

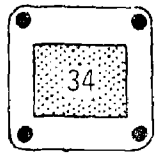
Media component not filled in.



Mostly reading materials are used in this program, about 90 percent of the time. These reading materials are single textbook (1) and some instructor designed worksheets (5). The text that is used is determined by the program, the worksheets that are occasionally used are determined by the instructor. Occasionally, audio-visual materials are used, about 3 percent of the time. These audio-visual materials are films (1) and are chosen by the instructor. Seldom, (about 3 percent of the time) the learners can choose to work with manipulative materials. These materials are games (2). About 4 or 5 percent of the time the learners are taught in lectures (2) in "no media." The instructors determine when it is appropriate to use a lecture type of situation for instruction.

No recorded information is referred to or used when identifying the types of media that will be used by the learners.

Meetings are not held to discuss, plan or schedule the types of media that will be used by learners.



This program uses reading activities and class discussions ("no media"). Both the reading activities and the class discussions are used about 50 percent of the time.

There is quite a variety of reading materials used: multi-texts (2), instructor written materials (5), learner written materials (6), workbooks (4) and other reading materials, for example, library books and magazines (7). These reading materials are sometimes determined by the instructors, sometimes determined by the learners and sometimes chosen by

both in joint planning sessions. Recorded information about the available reading materials is sometimes used by both the learners and instructors in determining what specific reading materials will be used by a learner.

Class discussions (1) are most often scheduled by the instructors but occasionally learners may request discussions or meetings with the instructors. Instructors very seldom use recorded information to determine that a class or group discussion will be used, but learners who request discussions or meetings with instructors often do use some recorded information (usually their own test scores).

Planning sessions are used in order for both the learners and instructors to decide together what are the appropriate reading materials for certain learners. These sessions are scheduled to occur regularly, for example, every Monday morning.

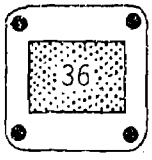
Learner activities are mostly with manipulative materials (about 60 percent of the time). Reading materials and audio-visual materials are each used about 20 percent of the time.

The manipulative materials include games (2), building tools (1), flat materials (3) and solid materials (4) and other manipulative materials, for example, camera equipment (5). Most of these materials are used by the learners in producing certain classroom projects. These materials are all chosen by the learners without the use of recorded information.

Reading materials include instructor written materials (5) and other reading materials, for example, library books (7). These reading materials are sometimes determined by the teacher and sometimes by the learner. Recorded information is not used in this determination.

Audio-visual materials include films (1), filmstrips (2), audio-tapes (3) and overhead transparencies (5). These audio-visual materials are chosen by the learners In choosing these materials, the learners use recorded information about what materials are available for help in creating certain projects.

Planning sessions for the scheduling of learner use of equipment are held regularly, for example, almost daily. These planning sessions involve both the instructor and the learners deciding who is to use what equipment for that day.



In this program, reading materials, audio-visual materials, manipulative materials and learning situations with no media are used about an equal amount of time by the learners (each about 25%).

The reading materials include multi-texts (2), workbooks (4), instructor written materials (5) and learner written materials (6). These reading materials are usually assigned to learners by the instructors on the basis of certain recorded information (usually test scores). Sometimes learners choose these materials but do not use recorded information in their determination.

Audio visual materials include filmstrips (2) and audio tapes (3). These materials are usually decided upon in joint planning sessions with learners and instructors. During these joint decision-making sessions, recorded information is sometimes used.

Manipulative materials include instructional games (2) and building tools (1) for the making of individual learner projects. These materials are usually decided upon in joint planning sessions with learners and instructors. In the decisions, identifying appropriate manipulative materials recorded information is not used.

No Media includes lectures (2), discussions (1)

and periods of time when the learners are expected to think alone (3). The lectures are determined by the instructor, discussion sessions or meditating time is most often decided upon jointly between the learners and the instructors. Recorded information is used sometimes by the instructors in their decision to hold a lecture.

GROUPING
DEFINITIONS

CATEGORIES OF GROUPS

Self. Those instructional activities where the learner is alone and not grouped with any other learners or any instructors.

With Instructor. Those instructional activities where the learner is grouped with one or more instructors. Within this classification are presented four sizes of groups of learners with instructors. These four categories are:

alone. One learner with one (or more) instructors.

small group. Two to seven learners with one (or more) instructors.

medium group. Eight to twenty learners with one (or more) instructors.

large group. Twenty-one or more learners with one (or more) instructors.

Without Instructor. Those instructional activities where the learner is grouped with one or more other learners but with no instructor directly associated with the group. Within this classification are presented four sizes of groups of learners without instructors.

peer tutor. One learner with one other learner, one acting as "teacher" and one as "student."

small group. Two to seven learners working together on an activity without an instructor.

medium group. Eight to twenty learners working together on an activity without an instructor.

large group. Twenty-one or more learners working together on an activity without an instructor.

PLANNING SESSIONS

Held. Planning sessions for this component refer to those meetings that are held to determine either with whom a learner is to be grouped (with or without instructor) or the size of the group with whom the learner is working or being instructed. These meetings may involve instructors or learners or both.

Regularly Scheduled. The meetings held to determine the appropriate group associations or sizes are an integral aspect to the instructional program. These meetings are held regularly (at least twice a semester) within the instructional year.

USES OF GROUPS

Percent of Instructional Time. The comparative amount of time that learners in the program spend in these nine classifications of grouping is shown by an approximate percentage for each category. The total percentage for the nine classifications should be 100 percent. The program profile shown by the nine classifications reflects the use of these groupings for all the learners in the program. It is a class use of groupings and does not address the issue of variation in the use of groupings by different learners within a program. If, for example, there were a class of 25 learners and 1 instructor and the learners were either working alone or meeting with the instructor alone in a tutorial situation, the greatest percentage of time that the learners can spend alone with the instructors in this class is 4 percent on the average. If each learners spent 4% of the instructional time with the instructor, this would then take up 100 percent of the instructor's time! Educational expenditures being what they are today, certain grouping characteristics have very real limitations.

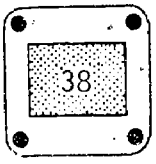
Who Determines. This identifies the participant in the program who makes the decision that learners will use a particular category of grouping (Self, Grouped Without Instructor, Grouped With Instructor). The decision may be made by the program as in instances where the program is designed for independent study or where a score on a test indicates that a conference with an instructor is required. The decision may be made by the instructor in instances where the instructor decides that a certain number of learners should be grouped together for a specific instructional session. The decisions may be made by the learners as in instances where the learner decides to study alone or with a peer or group of peers. Responsibility for these decisions may be shared, in which case an estimate of relative contributions to these decisions is shown.

Information Used. This identifies whether recorded information concerning the program or the learner is consulted in choosing specific categories of groupings for learners. Coupled with the graphics of the Who Determines rectangle, it also can identify which of the decision makers use recorded information.

GROUPING

EXTENDED VERBAL DESCRIPTIONS OF SLIDES 37—41

Grouping component not colored in.



This program includes mostly independent study, that is, the learner is alone about 95 percent of the time. This emphasis on independent study is built into the instructional program. Sometimes (about 4 percent of the time) the instructors decide that there are to be lectures or introductory sessions involving a large group of learners with the instructor. If a learner wants to meet with the instructor alone, it is up to the learner to make this arrangement. This is done about 1 percent of the time and usually is done by the learners as a result of certain test scores.

Planning sessions for determining appropriate grouping patterns for learners are not held.

This program includes mostly large group instruction with the instructors (about 80 percent of the time). The rest of the time, about 19 percent, is independent study with less than 1 percent of the time in a tutorial situation with instructors. All groupings are determined by the instructor. The instructors use recorded information to determine when a tutorial situation is needed.

Planning sessions are used for determining the lecture schedules and discussion periods for large group instruction. These sessions involve the instructors and occur regularly, for example, about once every two weeks.

Learners are instructed in this program in small (2-7) or medium (8-20) groups with instructors about 30 percent of the time (20 percent small group, 10 percent medium groups). The rest of the time (70 percent) the

learners are working without the instructors (the instructors are working with other small or medium groups of learners) in small groups with other learners (about 30 percent of the time) or in using other learners as instructors in a tutorial situation (about 15 percent of the time).

The instructors determine when the learners are to be grouped with instructors.

Independent study is sometimes suggested for certain learners by the instructors but most often it is the learners who decide to either work alone or in small groups with their peers.

A learner is assigned a peer tutor in a joint decision between the learner and the instructor.

No recorded information is used to identify a grouping pattern with a learner.

Planning sessions are held to determine when different groups of learners will meet with instructors. These planning sessions include the instructors and are regularly held, for example, about once a week.

In this program, the instructors try to be with single learners or with small groups of learners as much as possible. Those learners with whom the instructors are not working at any given time are encouraged to be in small groups with their peers. Learners are alone with instructors or adult instructional aides about 7 percent of the instructional time. (Note that in a class of 25 to 30 learners to an instructor, if each learner is with the instructor about 2 percent of the time, this would then take at least 50 percent of the instructor's time.) Learners are in small groups with instructors about 15 percent of the time.

Learners are with peer tutors about 8 percent of the time, are with small groups of peers 40 percent of the time and study alone about 30 percent of the time.

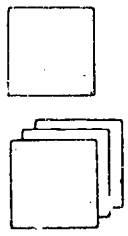
Most of the time it is the learner who decides to study alone; sometimes the instructor suggests it.

All other groupings, with the instructor or in groups without the instructor, are decided jointly between the learner and the instructor. In these joint decisions, recorded information about the learners past performance and current activities is often used.

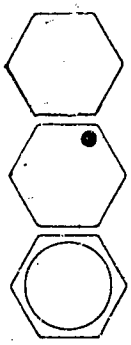
These joint decisions are made in planning sessions between the learners and the instructors. These planning sessions occur frequently, for example, almost daily.

PROGRAM PATTERN

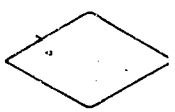
DEFINITIONS



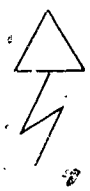
Work-Study Activity. Any instructional activity that the learner performs. These activities are further described in the Media and Grouping components. If there is more than one instructional activity from which to choose, this multiplicity of instructional activities is shown by including more than one square.



Assessment Activities. Any activity that is used to monitor a learner's interaction with instructional material. Results of these activities are described in the Learner Assessment component. Assessment activities may be represented as tests or other activities. In each case they may be recorded or non-recorded. In the event the assessment is recorded, a black dot is included inside the hexagon. If the assessment is some other kind of assessment (for example, a conference) rather than a test, a circle is drawn inside the hexagon.



Decision. A place in the instructional procedure where a choice is made. The choice may determine what the next instructional activity or assessment may be. This symbol is color coded to identify the decision maker(s), learners (red), instructor (blue), program (yellow).



Other Stored Information Used for the Decision. The use of information in a decision may include consulting learner records, files of past work or statements about program alternatives. This symbol denotes the use of such recorded information to assist in making a specific instructional decision.

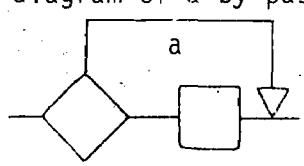
FLOWCHART DIAGRAM

The purpose of a flowchart is to show, through the use of simple lines and symbols, where decisions can be made to by-pass certain activities, to enter into or exit from certain activities or to re-route or re-perform certain activities. Here there follows a short description of how the lines of a flowchart diagram can show entrance or exit from an activity, by-passing of an activity or re-routing or re-performing of an activity.

Entrance or Exit. An activity is a square. Entrance into that activity is a line coming in from the left. Exit from that activity is a line coming out from that square from the right. In the Descriptor, entrance into each "unit of study activities" (see sequence) is shown by an arrow on the far left of the unit activities. Exit from a "unit of study activities" is shown by an arrow on the far right of the unit activities.

By-Pass. A by-pass is when a decision can be made to skip an activity or set of activities. A by-pass is shown by a line coming out from the top corner of a decision diamond, making a right angle to the right and passing over the particular activity or set of activities that can be skipped, then making another right angle and coming back to the original line of flow. In the diagram below, for example, path a shows that a by-pass may be made of the activity. (Note that a small arrow is put on the by-pass where it meets the original line of flow.) Path a shows that a decision can be made for some individuals to skip the particular activity represented by the square. Similarly, a by-pass shows that a number of activities can be skipped by passing above the appropriate activities before coming to meet the original line of flow.

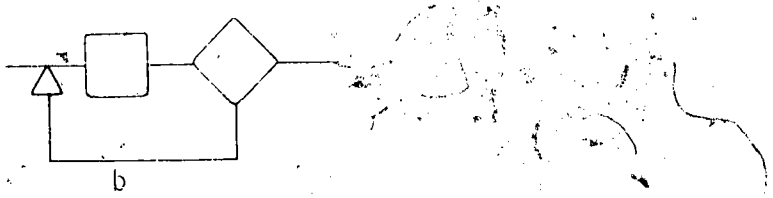
diagram of a by-pass:



Re-route. A re-route is when a decision can be made to redo an activity, a part of an activity or a set of activities. A re-route is shown by a line coming out from the bottom corner of a decision diamond, making a right angle to the left and passing under the particular activity or set of activities that may be performed again, then making another right angle and coming back to the original line of flow. In the diagram below, for example, path b shows a re-route may be made of an activity. (Note that a small arrow is put on a re-route where it meets the original line of flow.) Path b shows that a decision can be made for some individuals to perform again the particular activity (or part of the activity) represented by the square. Similarly, a re-route shows that a number of activities can be re-done by passing under

the appropriate activities before coming to meet the original line of flow.

diagram of a re-route:

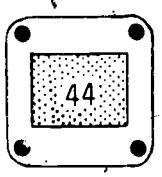


PROGRAM PATTERN

EXTENDED VERBAL DESCRIPTIONS OF SLIDES 42 — 45

Program Pattern Component not colored in. The symbols shown are the ones that will be used to show the pattern of work study and assessment that is repeated within each instructional unit.

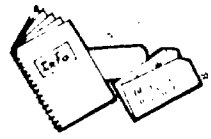
This is one pattern which portrays the order and options available between work-study materials and assessment that is repeated for a single program. For the units of this program, the instructor decides what unit the class will study, the students perform the activities that are included in that unit and a post-test follows. This post test is recorded and from the results of the test (as determined by the program) it is decided whether the students are ready to go to the next unit, or whether some of the students should go back and perform the activities again.



The pattern of work study activities and assessment for units in this program is a little more complex. For this program, the pattern that is repeated for each unit is as follows. First there is a pre-test that is recorded. From the scores of this pretest it is determined whether the learner can leave this unit and progress to the next unit or whether the learners must use the instruction of the unit. If the learner is to be instructed in the unit, there are a variety of activities from which the learners can choose. After a certain time, the teachers decide when a posttest is to be taken. This posttest is then taken and recorded and from the results of this posttest it is decided whether the learner is ready to go on to the next unit or whether the learners should try some more activities and take the posttest over again. This decision is based on the learner's posttest score but the instructor can use some of his own discretion about what is an appropriate successful score for an individual learner.

The pattern of work-study activities and assessment for units of this program is similar to that of slide 44 but includes more learner decisions. In this program, there is a prospectus of the unit which a learner can study and then decide whether this is time to study this particular unit. If the learner decides not to study this unit at this time, he goes to the next unit. If the learner does decide to take the unit, he starts by taking a pretest. This pretest is not recorded, but from the results of the pretest, the learner and the instructor can decide what are the appropriate instructional activities. Often other recorded information is used about the learner's past performance to help make this decision. After involving himself in the identified learning activities, the learner decides when to take the posttest. The results of this test are recorded and a conference is scheduled with an instructor. From this conference, the instructor and learner decide whether the learner is ready for another unit or whether it may be best to try some new instructional activities. The results from this conference are recorded.

RECORD OF INFORMATION
DEFINITIONS



CATEGORIES OF INFORMATION

Information about the learners and information about the program comprise the major headings for types of information.

Information About Learners. The two major classifications of information recorded about learners are learner assessment and learner use of program options.

Learner Assessment. The categories listed under learner assessment are the same as those cited in the Learner Assessment Procedures component: skills and concepts, interests and attitudes, constructions, interpersonal relations. These categories are meant to show the kind of information that are kept from the assessment of each learner.

Learner Use of Program Options. The categories listed under learner use of program options are six of the previously listed components: Objectives, Assessment, Sequence, Rate, Media and Grouping. These categories are meant to show if information is kept about what particular available options each learner has used in these six categories, if indeed, there are options in the category. For example, if there are options available in the types of media that can be used to teach a particular concept, is the type of media that each learners chooses recorded?

Information About Program. The two major classifications of information recorded about the program are Instructor and Option Availability.

Instructors. Programs may identify (provide records on) special information about participating instructors. Two type of information about instructors are categorized: Content Interest and Teaching Style Preference.

Content Interest is any special interest, continuing question or enthusiasm about specific aspects of

the instructional content. These interests may be evident from the instructor's past formal educational experience or may be evident from other sources, past or current activities.

Teaching Style Preference is the classroom style(s) which an instructor uses or wants to use. Styles may relate to preferences for group size or kinds of personal interactions with learners.

Option Availability. Programs may identify (provide records on) the choices the program offers within each component. The categories listed under option availability are the same six components listed under Learner Use of Available Options. These are: Objectives, Assessment, Sequence, Rate, Media and Grouping. For example, if there are options available in the sequencing of instructional units, are these available options recorded?

STORAGE FORM

The above information may be kept in a variety of ways. The second dimension of this component indicates the forms in which the kinds of information are kept. Information may be stored in one of the following ways:

Computer. Stored in computer which must be accessed by electronic equipment.

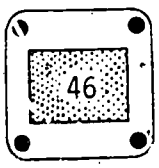
Record File. Typed or handwritten records, stored on paper files or posted.

Portfolio. Folders containing a learner's products, including tests or other examples of learner's work.

Other. Any alternative form of storage, such as a student or teacher manual.

RECORD OF INFORMATION

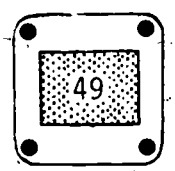
EXTENDED VERBAL DESCRIPTIONS OF SLIDES



Record of information component not filled in.

In this program only the results of those unit tests that are designed to evaluate the extent to which a learner has mastered certain skills and concepts are recorded. These are recorded in a record file.

A wide range of assessment information is recorded about each learner. This recorded information includes assessments of the learner's skills and concepts, interests and attitudes, construction and interpersonal relations. Assessments on learners' skills and concepts are kept on a record file and in a computer storage system. Assessments on learners' interests and attitudes and interpersonal relations are kept in the record file. Certain learner constructions and the assessment of these constructions are stored in learner portfolios.



In this program there is recorded information available about the options that are included within the program as well as recorded information about the assessment of learners. The recorded assessments of learners include assessments of skills and concepts, interests and attitudes and interpersonal relations. These assessments are recorded in a record file.

Recorded information about learners also includes each learner's rate of progress through the program. This is kept in the record file.

There is also a record of certain options or choices that are available within the program. These options include the choice of different objectives, different sequences of units, and different kinds of media which can be used to meet the chosen objectives. This information is kept in a program guide or prospectus that is prepared for the learners' use. (Thus, it is marked "other," since it is not a computer, record file or portfolio.)

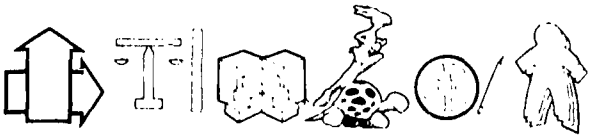
This program provides a wide range of recorded information. Information is recorded from assessments of learners' skills and concepts, interests and attitudes, constructions and interpersonal relations. This information is recorded both in a record file and a computer with learner constructions also being kept in a portfolio.

In this program, recorded information about learners also includes the learners' use of certain program options. The learner choice of objectives, choice of assessment procedures, choice of rate of progress and choice of media is recorded on each learner's portfolio.

Recorded information about the program includes some information about the instructors with whom the learner can choose to work as well as the options available within the program. The information about the instructors include special interests in the content that is covered in the program and the teaching styles and methods that are preferred by the instructors. This information is recorded in a record file to which the learners have access.

Recorded information about the options that are available in the program include the alternative objectives, the alternative procedures for assessing learners, the alternative sequencing of units, the alternative rates of progress, the alternative media that can be used and the different possible groupings that can be used. This information is recorded in both a record file and in a formal program guide that is available for each learner.

USE OF INFORMATION



DEFINITIONS

CATEGORIES OF INFORMATION

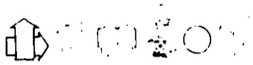
The categories of information are identical to the categories listed in the Record of Information component:

Information About Learners

- Learner Assessment:
  - Skills and Concepts
  - Interests and Attitudes
  - Constructions
  - Interpersonal Relations
- Learner Use of Program Options
  - Objectives
  - Assessment
  - Sequence
  - Rate
  - Media
  - Grouping

Information About Program

- Instructors
  - Content Interests
  - Teaching Style Preference



Option Availability

Objectives

Assessment

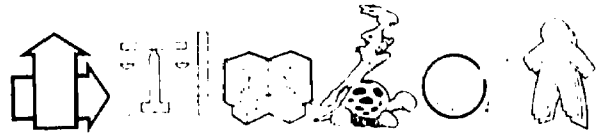
Sequence

Rate

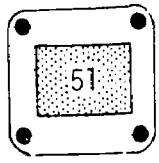
Media

Grouping

USE OF INFORMATION



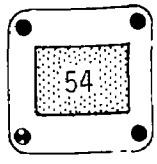
EXTENDED VERBAL DESCRIPTIONS OF SLIDES 51 – 55



Use of Information component not colored in. Note that for this component, there may be programs for which this component would have no color. In other words, there may be instructional programs that do not require that recorded information be used in making any instructional decisions. For example, this slide together with slide number 47 may portray some currently practicing programs.

The instructors use the recorded information about the learner assessment. This slide could be used with slide 48 to show a program that records a wide range of information about learners that is then used by the instructors in certain instructional decisions within the program.

Both the instructors and learners use the recorded information gathered from the learner assessment for instructional decisions. The recorded information about each learner's rate of progress is used by the instructors. The recorded information about the options available in certain program components are used mostly by the learners and occasionally by the instructors. This slide could be used with slide 49.



This slide used with slide 50, shows an instructional program where the wide range of information that is gathered is used in making instructional decisions. Information about the learners, both assessment and use of program options, is used by both learners and instructors. Information about the program, both about the instructors and about the program options, is used by the learners to make program decisions.

This slide, used with slide 50, shows an instructional program where a wide range of information is collected and recorded but not used. The only recorded information that is used for instructional decisions is assessment of the skills and concepts of learners, used by the instructors, and information about the options available in the sequence of units, used by the learners. Together with slide 50 this shows a program that collects and records more information than is necessary for the ways in which instructional decisions are made.

III.

Guide for Data Collection

The potential of the Descriptor rests in part with the fact that it can be used in a variety of ways. It is flexible and users are expected to find their own way to use it in communicating their ideas about individualizing instruction. These procedural directions are addressed to two sets of users. Some will find these directions which have grown out of the experiences of the developers helpful as guides to be followed with considerable consistency. Other users will carefully study and comprehend these procedural directions but will still find their own unique ways of making direct applications of the Descriptor. Whether users follow the practices outlined in this manual or evolve their own techniques, there is reason to believe that the experience of the developers will prove useful.

Specific materials associated with data collection have proven to be helpful and hence data collection procedures included a set of carefully packaged materials for use during interviews. Those materials are listed and in some cases briefly described here. Specific steps in the use of these materials are then discussed and the presentation of these specific steps is followed by brief mention of the way these procedural steps may be undertaken to collect data for three differing uses (description, comparison, and development stressed in the study.

materials

The most essential of the materials to be used in data collection is a section presented earlier in this Manual, Part II, Guide to Components. There one finds a complete description of the terms, symbols and components of the Descriptor. An understanding of Part II is essential before one can expect to successfully interview subjects. However extensive or specific the rest of the materials to be described here, none ask questions and none interpret the responses subjects make. The more familiar one is with the terms, symbols, and components as described in Part II, Guide to Components, the more readily the interviewer can respond to the uniqueness of the particular program about which data are being collected.

The Descriptor sheets have been prepared in three sizes. The intermediate size is that of the fold-out in this Manual. A larger one (25 x 36) has been used as a wall chart from which small group presentations can be made and a smaller one ($8\frac{1}{2}$ x 11) is used as individual seat copies. A set of 54 slides is included inside the back cover of this Manual. These slides provide three or four examples of illustrative completed components of the Descriptor. These slides presented during data collection sessions are used to facilitate discussion about the program under question. In Part IV of this Manual are separate prints of each component from the Descriptor. These are provided for those users who may want to use transparencies as a part of the data collection procedure. Finally, the set of prepared materials includes multi-shaped transparent, red, blue, yellow, and clear flow-chart symbols for use in designing the program pattern (the within module instruction/learning options). These three kinds of materials, then, Descriptors, slides and flow-chart symbols should be available at each of the data collection sessions. Additional readily available materials include four colored pencils for marking the Descriptor and, if the transparencies are to be used, four colored markers for the transparencies.

procedures

Procedures are presented here in a series of specific steps which have evolved through use by the developers during most of the data collection sessions. Again, the reader is reminded that no set of specific procedural steps can take the place of a thorough understanding of the components of the instrument as outlined and discussed in Part II, Guide to Components, of this Manual. The assumption is made in presenting these steps that the reader is familiar with the general nature of the instrument and is familiar with the specific intent of each Descriptor component.

Pre-session preparation. Prior to the initiation of the data collection session an illustrative Descriptor should be prepared. A completed Descriptor seems helpful to provide an overview of intent for the interviewees. In addition to the preparation of the Descriptor, the only pre-session preparation required is to make certain that all necessary materials are readily available.

In-session procedures. Procedures for data collection are described in two formats. Procedures may use slides and a blank Descriptor on which the interviewees responses are recorded or they may require in addition a set of transparencies on which their responses are recorded for later transfer to the Descriptor. Procedure A includes the use of the Descriptor; procedure B includes the transparencies. Combinations of the two procedures will frequently be used by users.

STEP ONE

Purpose: *To familiarize interviewees with the Descriptor and its potential to portray individualizing aspects of an instructional program and to motivate them in their desire to cooperate in providing data needed to create a description of their own program.*

Procedure same for A and B.

The data collection session begins with an overview of the Descriptor. Data sessions are most successful when they include at least two and not more than five individuals, all of whom are familiar with the program under examination. Use your prepared Descriptor (or the foldout in this Manual) for display purposes. To increase the group's knowledge of all parts of the Descriptor, provide individuals with the small 8½ x 11 copy or use medium size copies to be shared among interviewees.

Begin by talking about the three major aspects of individualization, aims, instruction, and management. Mention the components of each section as shown on the Descriptor. Then turn to the color key. Indicate that colors other than green reflect the person who is making decisions. A Descriptor which shows a considerable amount of red implies that much of the decision making is done by the learner; blue implies that it is the teacher who is making the decisions; and yellow implies that decisions are imbedded in the program materials.

Do not at this point take time to discuss each specific point which could be brought out by the Descriptor. Rather select one or two points as illustration of what the Descriptor says. For instance, if the sequence component is largely linear and yellow in color you may want to point out that fact and indicate that units or modules are sequenced consecutively and that apparently little deviation from this sequence is practiced by learners. Or you may wish to take an example from the assessment component and show how skills and concepts are the major concerns of evaluation although some attention through conference is given the attitudes and interests of learners, if indeed, these are the items reported by the Descriptor. One or two specific examples should suffice to motivate the interviewees to cooperate in the production of a similar report of their own program and also to give them a bit of a feeling for the kind of information you will be seeking.

Following this general overview and the two or three illustrative specific bits of information you are ready to proceed with your data collection.

STEP TWO

Purpose: *To obtain a comprehensive picture of one component of the program.*

After the program context component, the slides are sequenced to begin with the objectives component. You may or may not wish to continue with that part of the Descriptor. At times it has seemed more simple to begin with the sequence or rate component because interviewees are frequently more familiar with those aspects of individualizing.

Using the sequence component (as an example here) you show the first slide which illustrates one of the program alternatives. It shows a linear yellow sequence implying that students progress through the program units or modules in a pre-determined manner. You ask if the

program to be described is somewhat like the one presented. Usually some discussion will follow. This discussion is extremely important for it is here that interviewees come to understand what the nature of their own program is. Frequently, initial reactions are quite diverse and considerable discussion is required before the group comes to some agreement as to whether their program is, indeed, like that shown on the slide. Assuming they agree that their program is different you turn to the next slide (if you perceive through their discussion that their program is like another slide which is coming later on, you may wish to move directly to that slide). The next slide shows a network and is colored red to show that learners make many decisions about sequence among a number of alternatives which in some manner are made known to them. The procedure continues through the four slides relative to sequence or until you have a slide which closely approximates their program. Seldom does any slide precisely portray their program as the interviewees understand it. Hence, it is necessary to prepare a description which is unique to this program. It is at this point that we turn to Procedures A and B depending upon which set of materials are in use.

Procedure A - Descriptor

Once the interviewees have agreed as to the nature of their program relative to sequence, the interviewer turns to the blank Descriptor and colors in the sequence component to reflect the agreed upon description. As the coloring takes place, interviewees will still be making contributions and the interviewer will find himself altering the Descriptor until he finally completes something which is agreeable to all. (This use of the Descriptor results usually in a rather messy report and at a later time one usually wants to redo the art work in a more polished manner.)

Procedure B - Transparencies

With the transparencies, the interviewer uses the erasable colored crayons to show the results of the group thinking about sequence. He continues to alter this picture until it is satisfactory to the group. He then sets it aside for later transfer to the Descriptor or if there is a team of two data collectors, the second one now takes this transparency and reproduces it on the Descriptor while the first interviewer moves to the next component.

STEP THREE

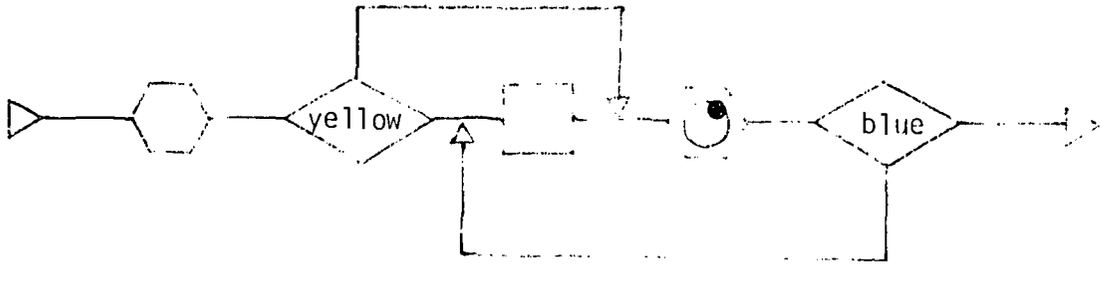
Purpose: *To complete the data collection for each of the components other than Program Pattern.*

The order in which separate components are described need not be fixed. The order may be one which the interviewer has pre-determined or one which is part pre-determined but may be adapted to respond to preference of interviewees. There are some components which necessarily follow each other. For example, Learner Assessment naturally follows Objectives and Use of Information naturally follows Record of Information.

STEP FOUR

Purpose: *To describe the within-module or within-unit learner options for the Program Pattern component.*

Using the flow chart symbols described earlier either on an overhead projector or a rough drawing on a sheet of paper, a flow chart is developed. It is suggested that one begin with a question about preassessment. If there is preassessment, a hexagon is used to start the chart. The dot in the hexagon indicates that a record is made of the results of the preassessment and a circle implies that the assessment is at least in part through personal interaction with the instructor. After assessment there may be a choice and if so a diamond is used and colored in terms of who makes that choice. Usually two arrows flow from the diamond. For example, one line can go directly to an instructional activity symbol (rectangle) and the other line can indicate some bypassing of instruction. The symbol for instruction (rectangle) is then included (in two or three overlapping rectangles in the event there are some alternative activities to serve a single program purpose or objective) Instruction may then be followed by some kind of assessment and the instruction by-pass can enter either before or after that assessment. A decision may then be made to exit or return for more instruction and if so, the decision diamond is then followed by an exit. Using this example, a simple program pattern may appear as follows:



The program pattern above then, shows that after preassessment, success is determined by program criteria (for example, one either takes instruction or is exempted from instruction depending upon the test score). After instruction or by-pass of instruction, learners take the post assessment which is a personal interaction with the instructor and is recorded. A decision is made by the instructor (blue) as to the student's success on the assessment and as a result the learner either returns for more assessment or exits this module or unit.

STEP FIVE

Purpose: *To prepare a written essay identifying the major characteristics of the program presented in the Descriptor.*

In the collection of the data for the Descriptor the interviewer becomes very much aware of both the general and the specific characteristics of the program. For the person viewing the Descriptor for the first time, an introduction is helpful. A written report 500 to 1000 words (two to four typewritten pages) identifies for the reader the highpoints of the program as revealed on the Descriptor. This statement in a sense is a summarization of the information on the Descriptor. In addition there are often certain kinds of information that might be of interest but are not included on the Descriptor. This information may include further description of the school, the length of time the individualized program has been in operation or certain unique organizational or physical features within the school. There may also be cases where the writer is familiar with other individualized programs and is able therefore to make comparisons relating the program being described to other programs. In the comparison use of the Descriptor the written report is particularly essential in drawing the attention of the reader to the points of particular discrepancy between the two programs.

STEP SIX

Purpose: *To report to the faculty or staff.*

Reporting to the faculty or staff responsible for the program should be made in two parts. In the first instance, immediately following the collection of data and very much as a part of the data

collection one should share the Descriptor with the staff for their reactions. Oftentimes clarification will come through discussion and some refinements in the Descriptor will be made.

More important, however, is the final document which accompanies the Descriptor and the manner in which this report is made. Although the written report (STEP FIVE) and the Descriptor provide the basic data concerning the program, an oral report which permits rather extensive discussion of the results has proven to be useful to program developers and faculty and staff in the program. When the data collectors provide this function, it takes out of the hands of local personnel the task of helping a group identify their misunderstandings and their inconsistencies within the staff. Almost without exception faculty and staff have reported new insights into the nature of their own program. The discussions which occur can be extremely useful and it is at this point that payoff for the work in data collection takes place. This presentation to faculty and staff should be undertaken with the realization that it is one of the important if not the most important of the six-step procedures outlined here.

Summary

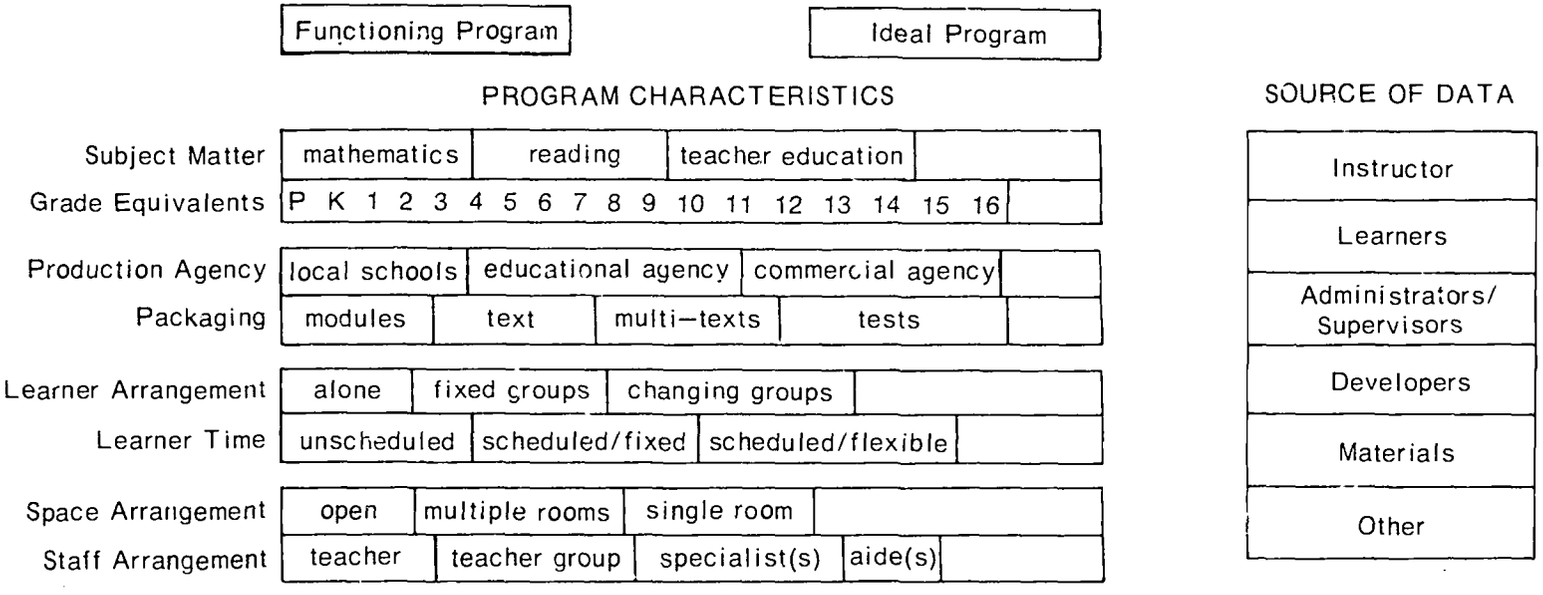
Given the information in Part II, Guide to Components, of this Manual and the brief procedural descriptions here, interviewers will find themselves able to gather the necessary data for use in preparing the Descriptor. Using either the slides and the Descriptor as data collecting devices or the slides and transparencies, the interviewer is able to provide interviewees with a continuous and developing picture of how their Descriptor will appear when completed.

IV.

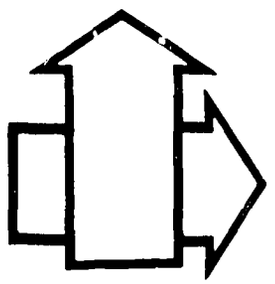
Materials for Data Collection

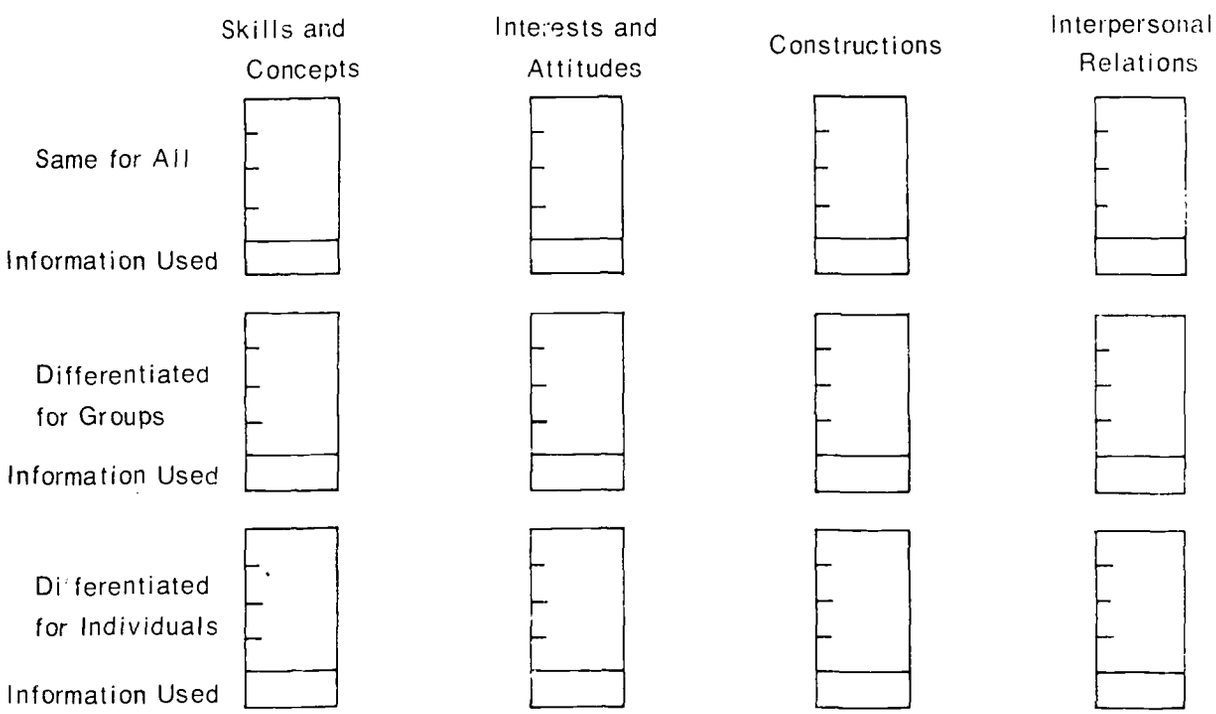
This section includes materials which may be used when applying the Descriptor to a particular individualized instructional program. It contains slides, a set of the ten Descriptor components and a large fold-out version of the Descriptor. The set of components is included for use in making transparencies of each component.

PROGRAM CONTEXT



OBJECTIVES

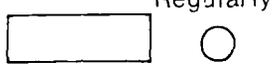




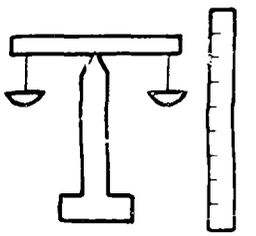
Planning Sessions

Held

Scheduled Regularly



LEARNER ASSESSMENT PROCEDURES

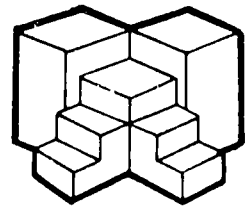


Testing	Skills and Concepts	Interests and Attitudes	Constructions	Interpersonal Relations
pre	☐ ○	☐ ○	☐ ○	☐ ○
mid	☐ ○	☐ ○	☐ ○	☐ ○
post	☐ ○	☐ ○	☐ ○	☐ ○
Conferences	☐ ○	☐ ○	☐ ○	☐ ○
Products	☐ ○	☐ ○	☐ ○	☐ ○
Other Observations	☐ ○	☐ ○	☐ ○	☐ ○

Planning Sessions

Held	Scheduled Regularly
☐	○

SEQUENCE



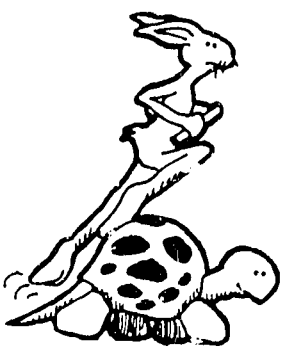
Linear Branched Network Nonspecified

Planning Sessions

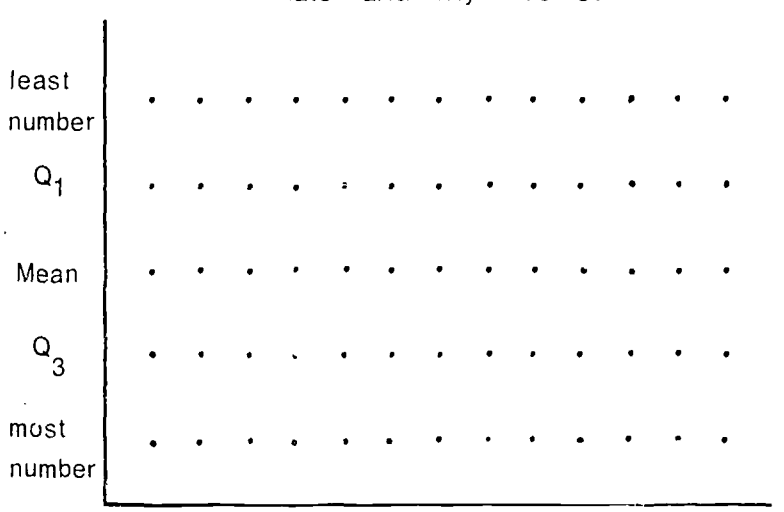
Held

Scheduled Regularly

RATE



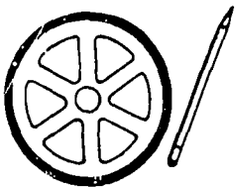
Rate Variability Observed

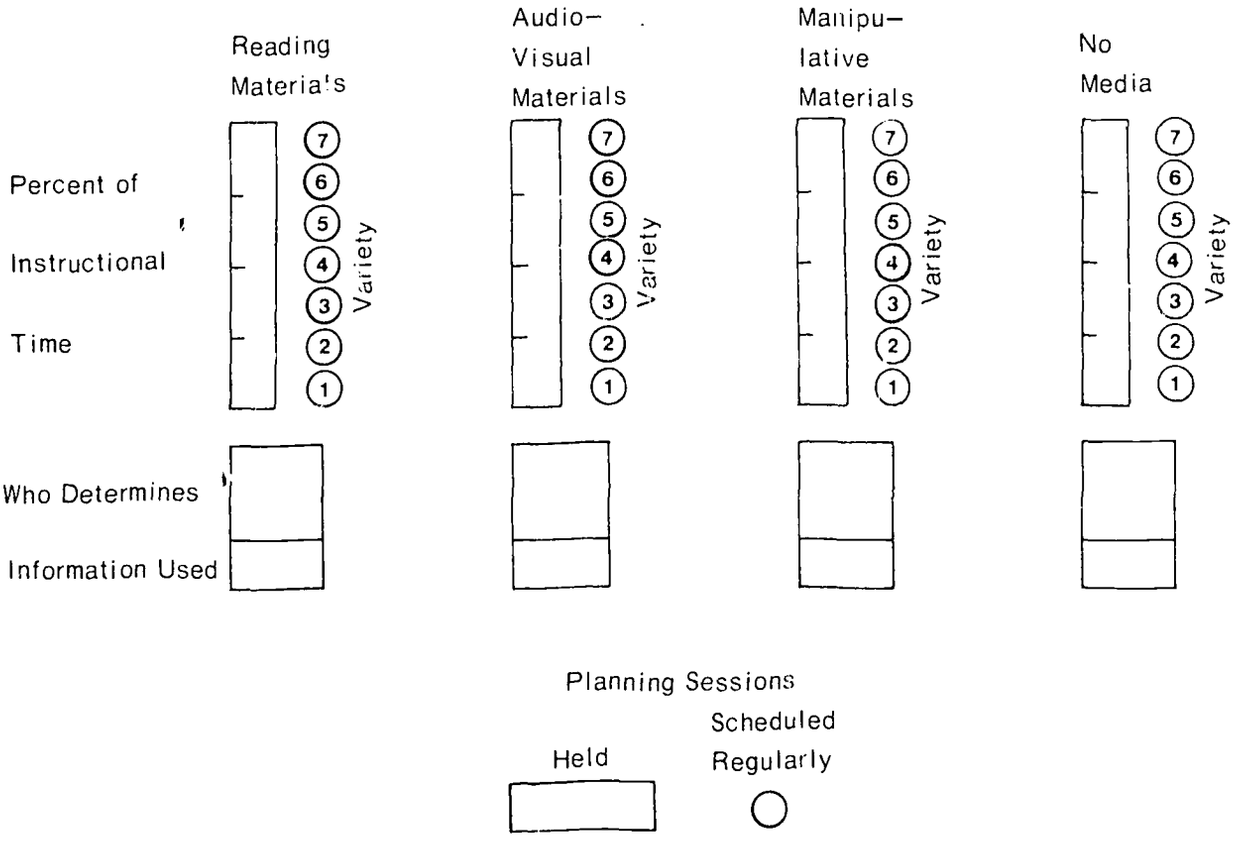


Planning Sessions

Held ☐ Scheduled Regularly ○

MEDIA



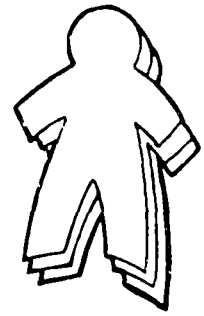


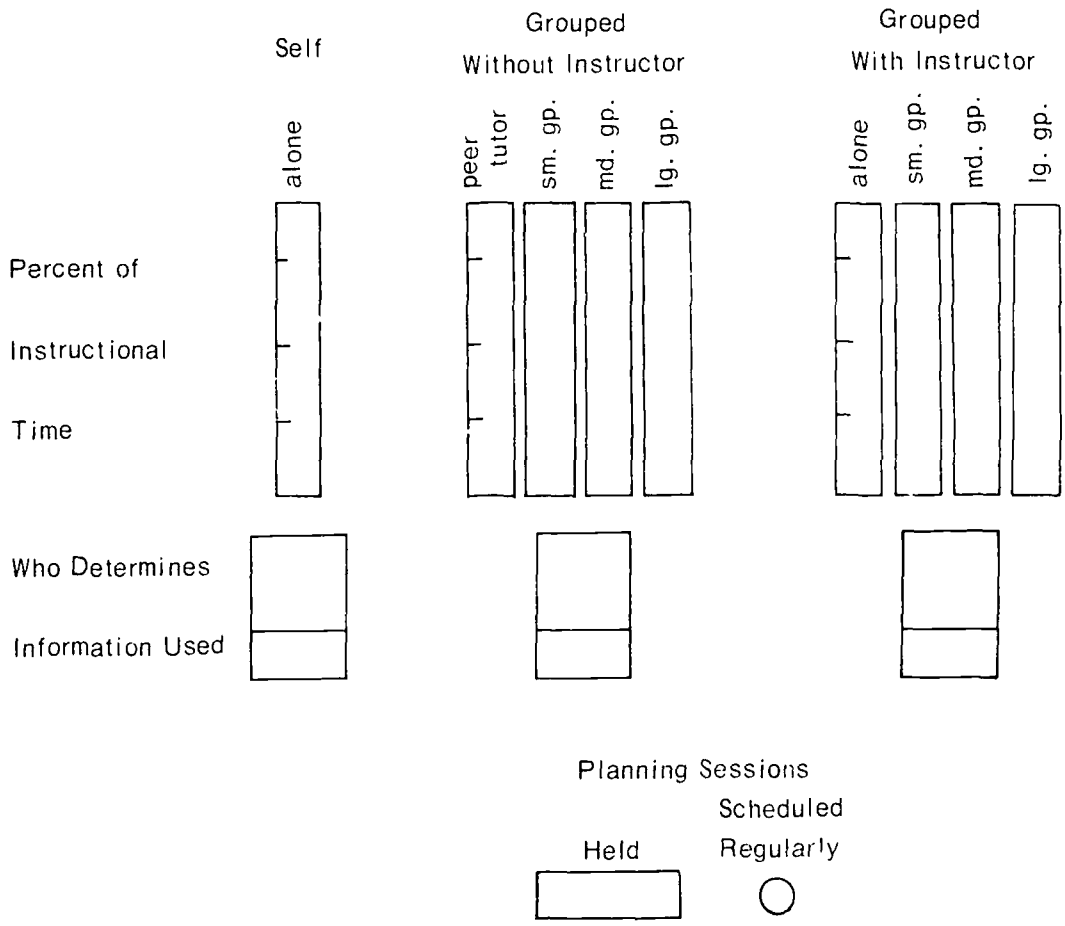
Planning Sessions

Held

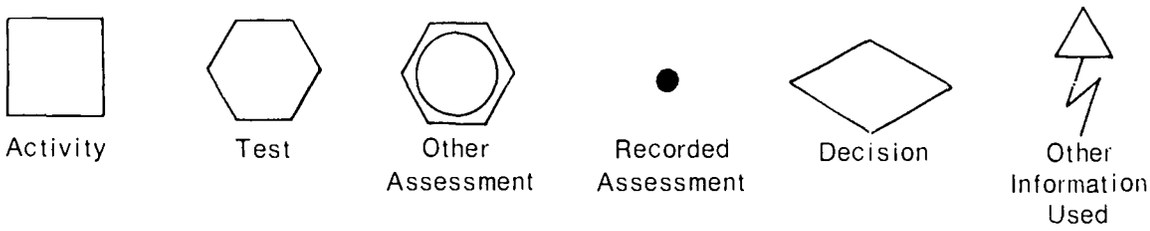
Scheduled Regularly

GROUPING

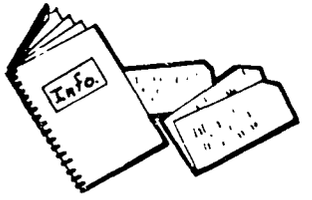



Self
Grouped
Without Instructor
Grouped
With Instructor
alone
peer tutor
sm. gp.
md. gp.
lg. gp.
alone
sm. gp.
md. gp.
lg. gp.
Percent of
Instructional
Time
Who Determines
Information Used
Planning Sessions
Scheduled
Regularly
Held

PROGRAM PATTERN

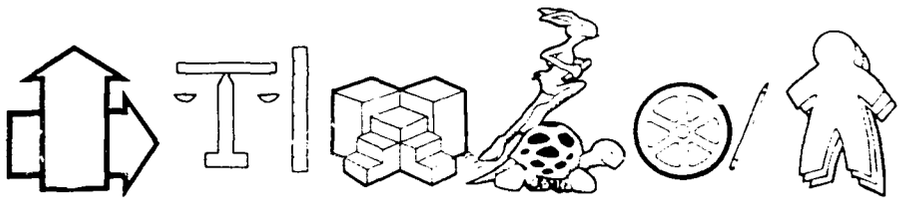


RECORD OF INFORMATION

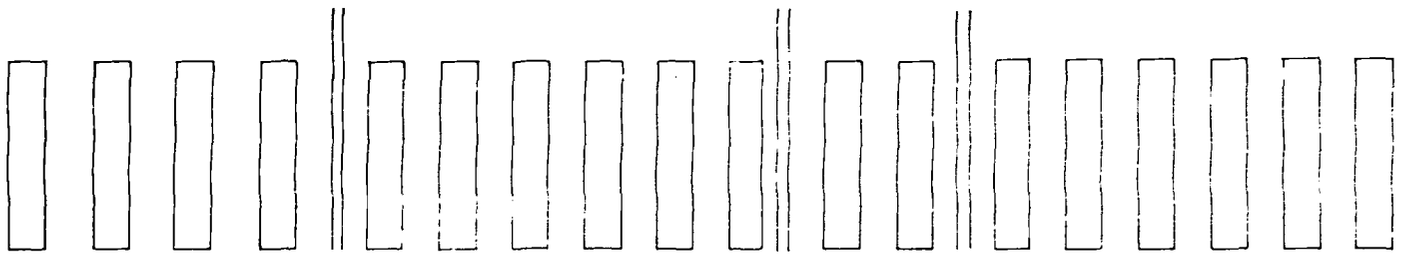


Storage Form	Information About Learners: Learner Assessment: Skills & Concepts	Attitudes & Interests	Construction Making	Interpersonal Relating	Learner Use of Program Options: Objectives	Assessment	Sequence	Rate	Media	Grouping	Information About Program: Instructors: Content Interest	Teaching Style Preference	Option Availability: Objectives	Assessment	Sequence	Rate	Media	Grouping
computer	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
record file	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
portfolio	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
other	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

USE OF INFORMATION

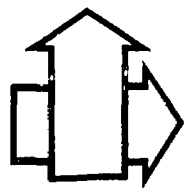


Who Uses the Recorded Information



Descriptor for

AIMS



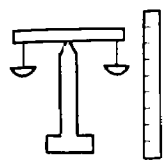
OBJECTIVES

	Skills and Concepts	Interests and Attitudes	Constructions	Interpersonal Relations
Same for All Information Used	☐	☐	☐	☐
Differentiated for Groups Information Used	☐	☐	☐	☐
Differentiated for Individuals Information Used	☐	☐	☐	☐

Planning Sessions

Held	Scheduled Regularly
☐	○

LEARNER ASSESSMENT PROCEDURES

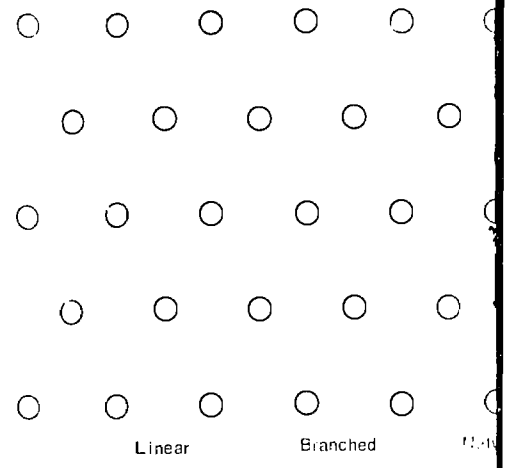


Testing	Skills and Concepts	Interests and Attitudes	Constructions	Interpersonal Relations
pre	☐ ○	☐ ○	☐ ○	☐ ○
mid	☐ ○	☐ ○	☐ ○	☐ ○
post	☐ ○	☐ ○	☐ ○	☐ ○
Conferences	☐ ○	☐ ○	☐ ○	☐ ○
Products	☐ ○	☐ ○	☐ ○	☐ ○
Other Observations	☐ ○	☐ ○	☐ ○	☐ ○

Planning Sessions

Held	Scheduled Regularly
☐	○

SEQUENCE



Linear Branched

Planning Session

Held	Sched Regul
☐	○

PROGRAM PATT

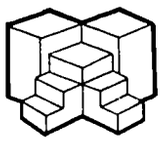
Activity Test Other Assessment Recorded Assessment

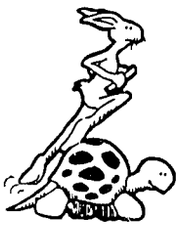
MEDIA

Reading Audio–Visual

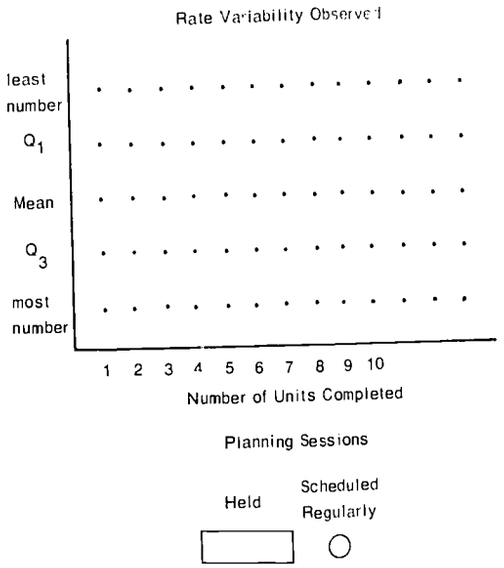
r Individualized Instruc

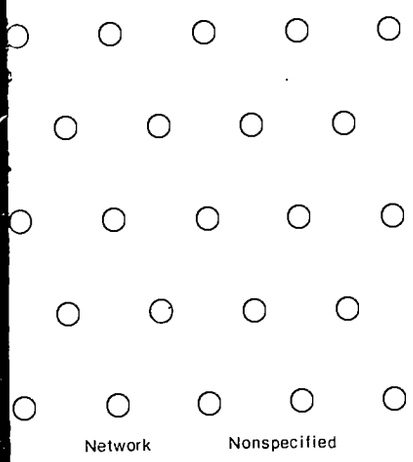
INSTRUCTION





RATE

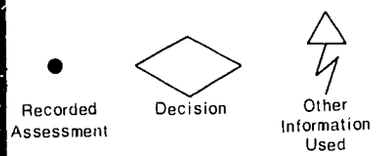




ning Sessions

eld Scheduled Regularly

ATTERN



MA

RECORD INFORMAT

Info

Learner Asses

Storage Form	Skills & Concepts	Attitudes & Interests	Construction
computer	○	○	○
record file	○	○	○
portfolio	○	○	○
other	○	○	○

USE OF INFORMA

Who Uses the Recorded Information

COLOR KEY

Learner determined

GROUPING

Self

Grouped Without Instructor

Grouped With Instructor

Manipu-

ed Instruction

Observed

8 9 10

Completed

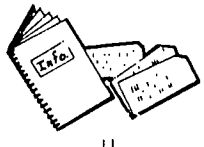
ssions

heduled
gularly

Grouped
With Instructor

MANAGEMENT

RECORD OF INFORMATION



Information About Learners

Learner Assessment

Storage Form	Skills & Concepts	Attitudes & Interests	Construction Making	Interpersonal Relating
computer	○	○	○	○
record file	○	○	○	○
portfolio	○	○	○	○
other	○	○	○	○

Learner Use of Program Options

Objectives	Assessment	Sequence	Rate	Media	Grouping
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○

Information About Program

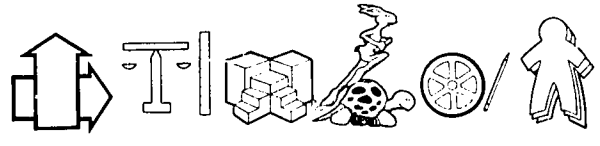
Instructors

Content Interest	Teaching Style Preference
○	○
○	○
○	○
○	○

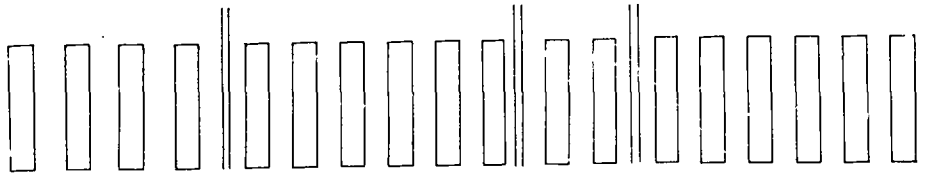
Option Availability

Objectives	Assessment	Sequence	Rate	Media	Grouping
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○

USE OF INFORMATION



Who Uses the Recorded Information



COLOR KEY

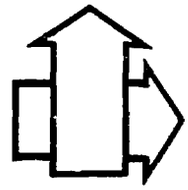
Decision Making

- Learner determined
- Instructor determined
- Program determined

Other Descriptive Features

AIMS

OBJECTIVES

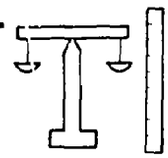


	Skills and Concepts	Interests and Attitudes	Constructions	Interpersonal Relations
Same for All				
Information Used				
Differentiated for Groups				
Information Used				
Differentiated for Individuals				
Information Used				

Planning Sessions

Held ☐ Scheduled Regularly ○

LEARNER ASSESSMENT PROCEDURES



Testing	Skills and Concepts	Interests and Attitudes	Constructions	Interpersonal Relations
pre	☐ ○	☐ ○	☐ ○	☐ ○
mid	☐ ○	☐ ○	☐ ○	☐ ○
post	☐ ○	☐ ○	☐ ○	☐ ○
Conferences	☐ ○	☐ ○	☐ ○	☐ ○
Products	☐ ○	☐ ○	☐ ○	☐ ○
Other Observations	☐ ○	☐ ○	☐ ○	☐ ○

Planning Sessions

Held ☐ Scheduled Regularly ○

PROGRAM CONTEXT

Functioning Program | Ideal Program

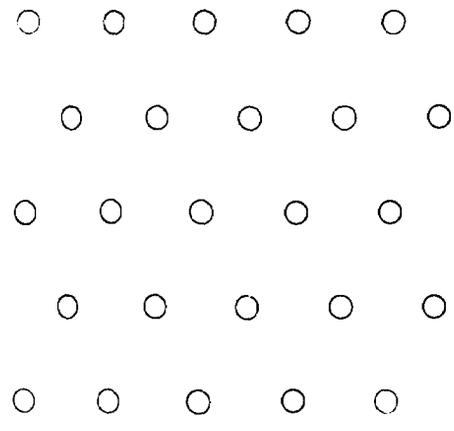
PROGRAM CHARACTERISTICS

Subject Matter	mathematics	reading	teacher education	
Grade Equivalents	P K 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16			
Production Agency	local school	educational agency	commercial agency	
Packaging	modules	text	multi-texts	tests
Learner Arrangement	alone	fixed groups	changing groups	
Learner Time	unscheduled	scheduled/fixed	scheduled/flexible	
Space Arrangement	open	multiple rooms	single room	
Staff Arrangement	teacher	teacher group	specialist(s)	aide(s)

SOURCE OF DATA

- Instructor
- Learners
- Administrators/ Supervisors
- Developers
- Materials
- Other

SEQUENCE



Linear Branched Net

Planning Sessio

Held ☐ Sche Regu ○

PROGRAM PATT

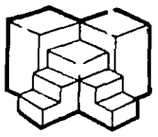
Activity ▭ Test ⬡ Other Assessment ○ Recorded Assessment ●

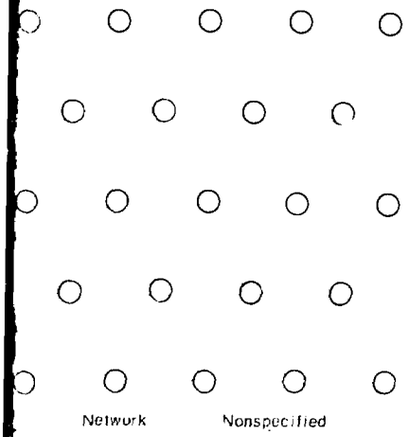
MEDIA

	Reading Materials	Audio-Visual Materials
Percent of Instructional Time	7 6 5 4 3 2 1 Variety	7 6 5 4 3 2 1 Variety
Who Determines		
Information Used		

Planning Sessio

Held ☐ Sche Regu ○



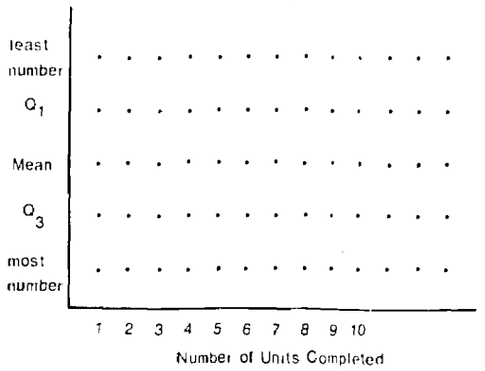


ning Sessions

Held | Scheduled Regularly

RATE

Rate Variability Observed



Planning Sessions

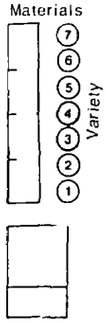
Held | Scheduled Regularly

ATTERN

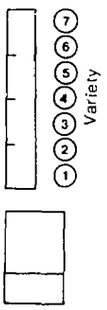
Recorded Assessment | Decision | Other Information Used

GROUPING

Manipulative Materials



No Media



	Self	Grouped Without Instructor			Grouped With Instructor			
	alone	peer tutor	sm. gp.	md. gp.	lg. gp.	alone	sm. gp.	md. gp.	lg. gp.
Percent of Instructional Time									
Who Determines Information Used									

Planning Sessions

Held | Scheduled Regularly

RECORD INFORMA

Info

Learner Asse

Storage Form	Skills & Concepts	Attitudes & Interests	Constr...tion
computer			
record file			
portfolio			
other			

USE OF INFORMA

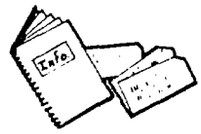
Who Uses the Recorded Information

COLOR KEY

Learner determined

MANAGEMENT

RECORD OF INFORMATION



Information About Learners

Learner Assessment

Learner Use of Program Options

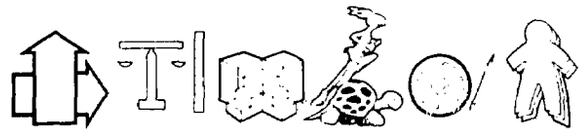
Information About Program

Instructor

Option Availability

Storage Form	Skills & Concepts	Attitudes & Interests	Construction Making	Interpersonal Relating	Objectives	Assessment	Sequence	Rate	Media	Grouping	Content	Objectives	Assessment	Sequence	Rate	Media	Grouping
computer	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
record file	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
portfolio	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
other	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

USE OF INFORMATION



Who Uses the Recorded Information

Grouped With Instructor

alone | sm. gp. | md. gp. | lg. gp.

Grouped Without Instructor

sm. gp. | md. gp. | lg. gp.

Planning Sessions

Held | Scheduled Regularly ○

8 9 10

Completed

Sessions

Scheduled

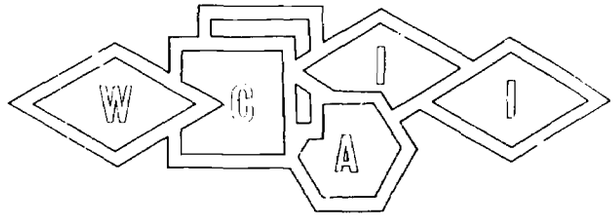
Regularly ○

COLOR KEY

Decision Making

- Learner determined
- Instructor determined
- Program determined

Other Descriptive Features



WISCONSIN CENTER FOR THE ANALYSIS OF INDIVIDUALIZED INSTRUCTION

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University of Wisconsin–Madison

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